

men. of the search topic, and describe as specifically as possible the subject matter to be searched. Include the res, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. at may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

→ 2004/8 53516 - 5,893,840
 - 3,222,882 - 5,089,101
 - 6,087,412

4,857,651 (8 of 11)
 4,416,474
 4,306,018
 1,3-8,10,20-24

Please search claim 13 generally plus
 (Table I lists ^{some} examples of nonvolatile reactive amines)
 and specifically w/ the highlighted examples of Table I
 plus (meth)acryl and N-vinyl ligands are
 examples of the used amine compounds

glycol ⇒ ^{ex} diethylene glycol, ethylene glycol,
 1,4-bisylene glycol (see Table IV)

and the highlighted compounds of Table II for the
 hydrox-bearing unsaturated ester.

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: _____	_____ NA Sequence (#)	_____ STN _____ Dialog
Searcher Phone #: _____	_____ AA Sequence (#)	_____ Questel/Orbit _____ Lexis/Nexis
Searcher Location: _____	_____ Structure (#)	_____ Westlaw _____ WWW/Internet
Date Searcher Picked Up: _____	_____ Bibliographic	_____ In-house sequence systems
Date Completed: _____	_____ Litigation	_____ Commercial _____ Oligomer _____ Score/Length _____ Interference _____ SPDI _____ Encode/Transl _____ Other (specify)
Searcher Prep & Review Time: _____	_____ Fulltext	
Online Time: _____	_____ Other	

=> d his ful

(FILE 'HOME' ENTERED AT 15:45:31 ON 07 OCT 2005)

FILE 'REGISTRY' ENTERED AT 15:47:38 ON 07 OCT 2005

E BUTENOATE/CN
L1 1 SEA ABB=ON "BUTENOIC ACID"/CN
E SORBITAN/CN
L2 1 SEA ABB=ON SORBITAN/CN
L3 37 SEA ABB=ON C30H50O12/MF
L4 0 SEA ABB=ON L3 AND NR=0 AND NRS=0
L5 0 SEA ABB=ON L3 AND NR=0
L6 0 SEA ABB=ON L3 AND NRS=0
L7 1 SEA ABB=ON D-GLUCITOL, HEXABUTANOATE/CN
E SORBITAN/CN
L8 2 SEA ABB=ON "SORBITAN CAPROATE"/CN
E SORBITAN/CN
E SORBITAN, TETRAKIS-/CN
L9 1 SEA ABB=ON "SORBITAN, TETRAKIS(2-METHYL-2-PROPENOATE)"/CN
E 2-BUTENOIC ACID/CN
L10 1 SEA ABB=ON "2-BUTENOIC ACID"/CN
L11 2003 SEA ABB=ON 50-70-4/CRN
L12 0 SEA ABB=ON 15105-17-6/CRN
L13 334 SEA ABB=ON C4H6O2/MF
L14 0 SEA ABB=ON L11 AND L13

FILE 'HCAPLUS' ENTERED AT 16:13:47 ON 07 OCT 2005

L15 14734 SEA ABB=ON L11
L16 0 SEA ABB=ON L15 AND ?BUTENOATE?
L17 319 SEA ABB=ON L15 AND ?BUTEN?
L18 7000 SEA ABB=ON L15 AND ?ESTER?
L19 69 SEA ABB=ON L15 AND ?TETRAKIS?
L20 12 SEA ABB=ON L19 AND ?BUTEN?

FILE 'REGISTRY' ENTERED AT 16:21:48 ON 07 OCT 2005

L21 1 SEA ABB=ON SORBITAN/CN

FILE 'HCAPLUS' ENTERED AT 16:21:48 ON 07 OCT 2005

L22 2318 SEA ABB=ON L21

FILE 'REGISTRY' ENTERED AT 16:21:55 ON 07 OCT 2005

E SORBITAN/CN
L23 1 SEA ABB=ON SORBITAN/CN
L24 6 SEA ABB=ON (88-12-0 OR 228728-06-7 OR 23778-52-1 OR 228718-14-7 OR 78146-71-1 OR 228718-11-4 OR 152383-40-9)/RN
L25 1 SEA ABB=ON 228718-06-7/RN
L26 7 SEA ABB=ON L24 OR L25

FILE 'HCAPLUS' ENTERED AT 16:31:29 ON 07 OCT 2005

L27 4115 SEA ABB=ON L26
L28 2 SEA ABB=ON L27 AND ?NONVOLATIL?(W)?REACTIV?(W)?AMINE?
L29 0 SEA ABB=ON L27 AND ?HYDROXYL?(3A)?BEAR?(3A)?UNSAT?(3A)?ESTER?
L30 105 SEA ABB=ON L27 AND ?UNSAT?(3A)?ESTER?
L31 4 SEA ABB=ON L30 AND ?HYDROXYL?
L32 0 SEA ABB=ON L27 AND (?SATUR?(3A)?OLIG?(3A)?GLYCOL?)
L33 23 SEA ABB=ON L27 AND ?SATUR?(3A)?(?OLIG? OR ?GLYCOL?)
L34 27 SEA ABB=ON L28 OR L31 OR L33
L35 2 SEA ABB=ON ?NONVOLATIL?(W)?REACTIV?(W)?AMINE?
L36 592 SEA ABB=ON ?HYDROXYL? AND ?UNSAT?(W)?ESTER?
L37 2 SEA ABB=ON L35 AND ?NONVOLATIL?(W)?REACTIV?(W)?AMINE?

L38 2 SEA ABB=ON L35 OR L37
L39 5 SEA ABB=ON L31 OR L37
L40 3 SEA ABB=ON L39 AND (PRD<19971219 OR PD<19971219)

FILE 'USPATFULL' ENTERED AT 16:38:49 ON 07 OCT 2005

L41 70 SEA ABB=ON L39 AND (PRD<19971219 OR PD<19971219)
L42 0 SEA ABB=ON L41 AND ?UNSATUR?(3A)?HYDROXYL?(3A)(?OLIGO? OR
?GLYCOL?)
L43 7 SEA ABB=ON L41 AND ?HYDROXYL?(3A)(?OLIGO? OR ?GLYCOL?)
L44 4 SEA ABB=ON L41 AND ?UNSATUR?(3A)?HYDROXYL?
L45 11 SEA ABB=ON L43 OR L44

FILE 'HCAPLUS' ENTERED AT 16:40:58 ON 07 OCT 2005

SELECT RN L40 1-3

FILE 'REGISTRY' ENTERED AT 16:41:45 ON 07 OCT 2005

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100-69-6/BI OR 100602-23-1/BI OR 100602-24-2/BI OR 101-37-1/BI
OR 101-43-9/BI OR 103-11-7/BI OR 105-16-8/BI OR 105849-31-8/BI
OR 10595-06-9/BI OR 106-74-1/BI OR 106-90-1/BI OR 106-91-2/BI
OR 107-13-1/BI OR 107-18-6/BI OR 108-31-6/BI OR 110-17-8/BI OR
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OR 40074-34-8/BI OR 45127-97-7/BI OR 4551-90-0/BI OR 48145-04-6
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BI OR 923-26-2/BI OR 92933-

FILE 'HCAPLUS' ENTERED AT 16:41:57 ON 07 OCT 2005

L47 1 SEA ABB=ON L45 AND L46

1 cit from CAPLUS

FILE 'USPATFULL' ENTERED AT 16:42:53 ON 07 OCT 2005

DELETE SELECT

SELECT RN L45 1-11

FILE 'REGISTRY' ENTERED AT 16:43:13 ON 07 OCT 2005

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OR 106-91-2/RN OR 108-05-4/RN OR 112-34-5/RN OR 114348-18-4/RN
OR 114348-19-5/RN OR 114348-20-8/RN OR 1271-19-8/RN OR
25213-61-0/RN OR 344-07-0/RN OR 548-62-9/RN OR 79-41-4/RN OR
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OR 27813-02-1/RN OR 3290-92-4/RN OR 4098-71-9/RN OR 48145-04-6
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71519-83-0/RN OR 9052-50-0/RN OR 9063-78-9/RN OR 923-26-2/RN
OR 100-52-7/RN OR 10025-87-3/RN OR 10026-04-7/RN OR 10043-22-8/
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OR 128771-71-1/RN OR 13048-33-4/RN OR 1321-11-5/RN OR 1344-08-7
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L49 FILE 'USPATFULL' ENTERED AT 16:44:16 ON 07 OCT 2005
11 SEA ABB=ON L48 AND L45

11 cits from USPatFull

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 6 OCT 2005 HIGHEST RN 864628-86-4

DICTIONARY FILE UPDATES: 6 OCT 2005 HIGHEST RN 864628-86-4

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE HCAPLUS

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FILE COVERS 1907 - 7 Oct 2005 VOL 143 ISS 16
FILE LAST UPDATED: 6 Oct 2005 (20051006/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 6 Oct 2005 (20051006/PD)
FILE LAST UPDATED: 6 Oct 2005 (20051006/ED)
HIGHEST GRANTED PATENT NUMBER: US6952836
HIGHEST APPLICATION PUBLICATION NUMBER: US2005223461
CA INDEXING IS CURRENT THROUGH 6 Oct 2005 (20051006/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 6 Oct 2005 (20051006/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

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>>> USPAT2 is now available. USPATFULL contains full text of the    <<<
>>> original, i.e., the earliest published granted patents or      <<<
>>> applications. USPAT2 contains full text of the latest US      <<<
>>> publications, starting in 2001, for the inventions covered in  <<<
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>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.                                                       <<<
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>>> USPATFULL and USPAT2 can be accessed and searched together    <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to      <<<
>>> enter this cluster.                                           <<<
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>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication.                       <<<
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This file contains CAS Registry Numbers for easy and accurate substance identification.

Application No.: 09/581,781

3

Docket No.: 60590(50531)

8. (New) The composition of claim 1, comprising:

an essentially nonvolatile reactive amine; and

a hydroxyl-bearing unsaturated ester or ether or ether-ester, or an unsaturated hydroxyl-bearing oligomeric glycol or oligool.

9. (New) The composition of claim 1, comprising:

an essentially nonvolatile reactive amine;

a non-hydroxyl-bearing unsaturated ester or ether or ether-ester; and

a saturated or unsaturated hydroxyl-bearing oligomeric glycol or oligool.

10. (New) The composition of claim 1, comprising:

an essentially nonvolatile reactive amine;

a hydroxyl-bearing unsaturated ester or ether or ether-ester; and

a saturated or unsaturated hydroxyl-bearing oligomeric glycol or oligool.

11. (New) The composition of claim 1, comprising:

an essentially nonvolatile reactive amine;

an unsaturated ester; and

a saturated or unsaturated hydroxyl-bearing oligomeric glycol or oligool.

12. (New) The composition of claim 1, comprising:

an essentially nonvolatile reactive amine;

a non-hydroxyl-bearing unsaturated ester; and

a saturated or unsaturated hydroxyl-bearing oligomeric glycol or oligool.

13. (New) The composition of claim 1, comprising:

an essentially nonvolatile reactive amine;

a hydroxyl-bearing unsaturated ester; and

a saturated or unsaturated hydroxyl-bearing oligomeric glycol or oligool.

14. (New) The composition of claim 1, comprising:

1 exceeding 2% at 25°C. Specific examples of such useful non-
2 volatile reactive amines are given in Table (1). These examples
3 are intended to be illustrative rather than exhaustive of the
4 scope of useful materials.

6 TABLE I

7	(1A)	N-vinyl pyrrolidone	88-12-0 p.11
8	(1B)	N,N,N'-tris (2-butenyl), ethylene diamine	228718-06-7
9	(1C)	N', methyl-1, 3-propylene diamine mono 2- propenamide	p.12
10	(1D)	N, 2-propenyl, bis (2-hydroxy)propyl amine	
11	(1E)	N, 2-propenyl, N'- (2-hydroxy)ethyl, hexamethylene	
12		triamine	
13	(1F)	4-(N, 3-hydroxypropyl, N-vinyl) 2-amino ethyl 2-butenolate	
14	(1G)	2-[N, -(2-oxa-cyclopentadienyl)] amino acetic acid ethyl	
15		ester	
16	(1H)	4-(N,N bis vinyl) 1,3-pentanediol	
17	(1I)	tetraethylene glycol mono 3-(N, ethyl) amino, 2-(methyl)	
18		2-propenoate	
19	(1J)	N,N-divinyl glutamic acid 2-propenyl ester	
20	(1K)	6-(N,N bis vinyl) hexanoic acid ethyl ester	
21	(1L)	Titanium IV tetrakis N, 2-aminoethyl ethanolato	

22 The preferred types of the hydroxyl bearing, unsaturated
23 esters and/or ethers and/or ether-esters useful in the practice
24 of this invention are those having vapor pressures below 0.1 mm
25 Hg at 25°C, which are capable of air initiated, oxidative
26 oligomerization and/or polymerization derived non-reversible

1 Examples of such incompletely etherified and/or esterified
2 oligomeric glycols and/or oligools as are useful in the practice of
3 the instant invention are provided in Table IV. These examples are
4 intended to be illustrative rather than exhaustive of the scope of
5 useful materials.

6 Table IV

- 7 (4A) penta (ethylene glycol) mono methyl ether 23778-52-1 p.7
8 (4B) tetra (1,4-butylene glycol) mono (2-methyl) butyrate 228718-14-7
9 (4C) 1-hydroxy-2,5-bis methyl-3,6,9,12-tetraoxa tetradecane p.9
10 (4D) 4-oxaheptane-1,2,6,7-tetraol mono acetate, mono 2-propyl
11 ether (mixed isomers)
12 (4E) ethoxylated (6) 1,2,4-butanetriol bispropanoate (mixed
13 isomers)
14 (4F) tris 1,2,5-n pentane triol tetraethyl ether (mixed isomers)
15 (4G) tris (1,3-propane-diol) mono isopentyl ether
16 (4H) 1,2- bis (2- hydroxy ethoxy ethyl) 1,2,3-propane triol
17 (4J) polyethylene glycol (300) mono amyl ether
18 (4K) tris neopentyl glycol mono n-propyl ether

19 The surfactants most useful in the practice of this invention
20 are those having vapor pressures below 0.1 mm Hg at 25°C, which are
21 capable of non-reversible bonding, under normal processing
22 conditions, to film component(s) and/or substrate in order to
23 maximize coating properties, while minimizing post film formation
24 environmental sensitivity, and which serve to efficiently wet
25 substrates coated, and to disperse particulates, if any, employed
26 in the formulated latex coating. Among the surfactants found to be

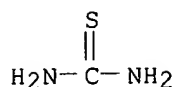
00501781.061700

1 bonding, under normal latex application conditions, to film
2 component(s) and/or to substrate, in order to maximize coating
3 properties via crosslinking the resulting latex thereby
4 minimizing its (post film formation) environmental sensitivity.
5 Examples of such unsaturated esters and ether and ether-esters as
6 are useful in the practice of the instant invention are provided
7 in Table II. These examples are intended to be illustrative
8 rather than exhaustive of the scope of useful materials.

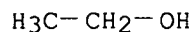
9 Table II

- 10 (2A) trimethylol propane bis (2-methyl)-2-propenoate ester ~~228718-18-1~~
11 (2B) sorbitan tetrakis 2-butenate ester ~~?~~ p.10
12 (2C) bis pentaerythritol 2-propenolato, tris 2-propenoate ester
13 (2D) hexanoic acid 6-hydroxy, (2-propenoato)ethyl ester
14 (2E) citric acid mono isodecenyl ester
15 (2F) malic acid bis cinnamyl ester 78146-71-1 p.8
16 (2G) 3-heptanoyl furfuryl alcohol 228718-11-4 p.8
17 (2H) 1,2,3-propanetriol 1-vinyl ether, 2-phenyl carboxylate ester
18 (2J) trimeric 2-butenediol mono (methyl) glutarate ester
19 (2K) ethoxylated (4) bis phenol A mono 2-propenoate ester 152383-40-9 p.8

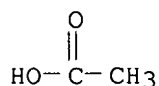
20 The preferred types of the non-hydroxyl bearing unsaturated
21 esters and/or ethers and/or ether-esters useful in conjunction with
22 the practice of this invention are those having vapor pressures
23 below 0.1 mm Hg at 25°C, which are capable of air initiated
24 oxidative oligomerization and/or polymerization, and non-reversible
25 bonding, under normal latex application conditions, to film
26 component(s) and/or to substrate, in order to maximize coating



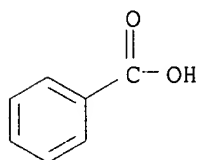
RN 64-17-5 USPATFULL
CN Ethanol (9CI) (CA INDEX NAME)



RN 64-19-7 USPATFULL
CN Acetic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 65-85-0 USPATFULL
CN Benzoic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



L49 ANSWER 3 OF 11 USPATFULL on STN
ACCESSION NUMBER: 92:12561 USPATFULL
TITLE: Cationic electrodeposition coating composition
INVENTOR(S): Hayashi, Hirokazu, Hiratsuka, Japan
Aihara, Tetsuo, Isehara, Japan
Nagaoka, Haruo, Hiratsuka, Japan
Kamikado, Koji, Yokohama, Japan
Nakatani, Eisaku, Hiratsuka, Japan
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Hyogo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5089101		19920218 <--
APPLICATION INFO.:	US 1991-701632		19910515 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-293005, filed on 3 Jan 1989, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1988-1189	19880108 <--
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Niebling, John	
ASSISTANT EXAMINER:	Marquis, Steven P.	

=> d que stat 147

L24 6 SEA FILE=REGISTRY ABB=ON (88-12-0 OR 228728-06-7 OR 23778-52-1
OR 228718-14-7 OR 78146-71-1 OR 228718-11-4 OR 152383-40-9)/RN
L25 1 SEA FILE=REGISTRY ABB=ON 228718-06-7/RN
L26 7 SEA FILE=REGISTRY ABB=ON L24 OR L25
L27 4115 SEA FILE=HCAPLUS ABB=ON L26
L30 105 SEA FILE=HCAPLUS ABB=ON L27 AND ?UNSAT?(3A)?ESTER?
L31 4 SEA FILE=HCAPLUS ABB=ON L30 AND ?HYDROXYL?
L35 2 SEA FILE=HCAPLUS ABB=ON ?NONVOLATIL?(W)?REACTIV?(W)?AMINE?
L37 2 SEA FILE=HCAPLUS ABB=ON L35 AND ?NONVOLATIL?(W)?REACTIV?(W)?AM
INE?
L39 5 SEA FILE=HCAPLUS ABB=ON L31 OR L37
L41 70 SEA FILE=USPATFULL ABB=ON L39 AND (PRD<19971219 OR PD<19971219
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L43 7 SEA FILE=USPATFULL ABB=ON L41 AND ?HYDROXYL?(3A)(?OLIGO? OR
?GLYCOL?)
L44 4 SEA FILE=USPATFULL ABB=ON L41 AND ?UNSATUR?(3A)?HYDROXYL?
L45 11 SEA FILE=USPATFULL ABB=ON L43 OR L44
L46 127 SEA FILE=REGISTRY ABB=ON (88-12-0/BI OR 868-77-9/BI OR
100-43-6/BI OR 100-69-6/BI OR 100602-23-1/BI OR 100602-24-2/BI
OR 101-37-1/BI OR 101-43-9/BI OR 103-11-7/BI OR 105-16-8/BI OR
105849-31-8/BI OR 10595-06-9/BI OR 106-74-1/BI OR 106-90-1/BI
OR 106-91-2/BI OR 107-13-1/BI OR 107-18-6/BI OR 108-31-6/BI OR
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OR 56-40-6/BI OR 57-50-1/BI OR 5888-33-5/BI OR 60-32-2/BI OR
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OR 75-01-4/BI OR 7534-94-3/BI OR 79-06-1/BI OR 79-10-7/BI OR
79-41-4/BI OR 814-68-6/BI OR 818-61-1/BI OR 85548-14-7/BI OR
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89529-54-4/BI OR 89551-83-7/BI OR 89551-84-8/BI OR 89551-86-0/B
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89551-91-7/BI OR 89551-93-9/BI OR 8955
L47 1 SEA FILE=HCAPLUS ABB=ON L45 AND L46

=> d ibib abs hitstr 147

L47 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1966:26579 HCAPLUS

DOCUMENT NUMBER: 64:26579

ORIGINAL REFERENCE NO.: 64:4843e-f

TITLE: Cross-linked polymers as lubricant additives

INVENTOR(S): Berkowitz, Edward B.; Stadtmiller, William H.;
Berkowitz, Leonard

PATENT ASSIGNEE(S): Esso Research and Engineering Co.

SOURCE: 5 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

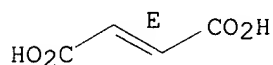
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3222282		19651207	US	19621227 <--

AB Oil-soluble polymeric additives, useful in improving the viscosity index of lubricating oils, contain the copolymerization product of 15-50 mole % of an ester of a C8-20 aliphatic alc. and a C4-5 α,β -unsatd. dicarboxylic acid, 50-85 mole% of a C2-3 alkylene ester of a C1-4 fatty acid, 1-10 mole % of a monomer selected from the anhydrides of C4-5 unsatd. dibasic acids or hydroxylalkyl acrylates, and 0.01-5 weight % of a compound containing ≥ 1 vinyl group in addition to a vinyl or an allyl group. Thus, a typical composition was prepared from 123.5 g. tallow fumarate, 201.0 g. C8-oxo fumarate, 195.5 g. vinyl acetate, 10.8 g. maleic anhydride, 2.2 ml. of tert-butyl perbenzoate, and 111 g. mineral oil diluent, and modified with 0.58-1.16 weight % acetyl triallyl citrate.

IT 110-17-8, Fumaric acid
 (esters, polymers with unsatd. esters
 with cross-linking by allyl esters, as lubricant additive)

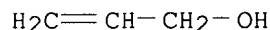
RN 110-17-8 HCAPLUS
 CN 2-Butenedioic acid (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT 107-18-6, Allyl alcohol
 (esters, unsatd. ester polymers
 cross-linked by, as lubricant additive)

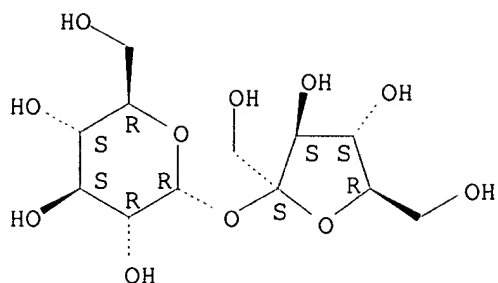
RN 107-18-6 HCAPLUS
 CN 2-Propen-1-ol (9CI) (CA INDEX NAME)



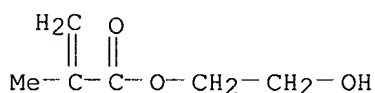
IT 57-50-1, Sucrose
 (esters, with α,β -dicarboxylic acids and their derivs.,
 hydrocarbon oil containing)

RN 57-50-1 HCAPLUS
 CN α -D-Glucopyranoside, β -D-fructofuranosyl (9CI) (CA INDEX NAME)

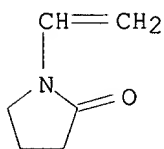
Absolute stereochemistry.



IT **868-77-9**, Ethylene glycol, methacrylate
 (polymers with **unsatd. esters** with cross-linkage by
 allyl esters, as lubricant additives)
 RN 868-77-9 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)

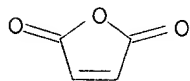


IT **88-12-0**, 2-Pyrrolidinone, 1-vinyl-
 (polymers with **unsatd. esters** with cross-linkage by
 allyl esters, lubricant-additive)
 RN 88-12-0 HCAPLUS
 CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



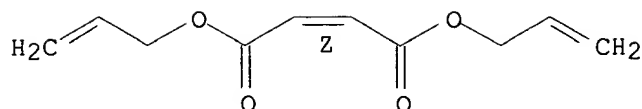
N-vinyl pyrrolidone

IT **108-31-6**, Maleic anhydride
 (polymers, with **unsatd. ester** cross-linked by allyl
 esters, as lubricant additive)
 RN 108-31-6 HCAPLUS
 CN 2,5-Furandione (9CI) (CA INDEX NAME)



IT **999-21-3**, Maleic acid, diallyl **ester** **2807-54-7**
 , Fumaric acid, diallyl **ester**
 (**unsatd. ester** polymers cross-linked by, as
 lubricant additive)
 RN 999-21-3 HCAPLUS
 CN 2-Butenedioic acid (2Z)-, di-2-propenyl ester (9CI) (CA INDEX NAME)

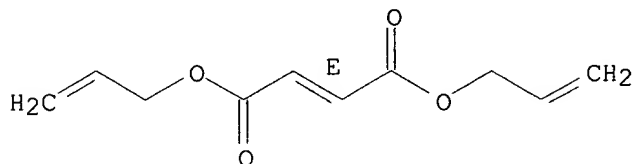
Double bond geometry as shown.



RN 2807-54-7 HCAPLUS

CN 2-Butenedioic acid (2E)-, di-2-propenyl ester (9CI) (CA INDEX NAME)

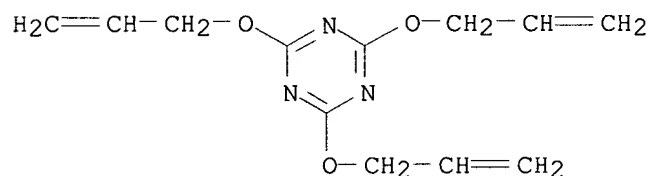
Double bond geometry as shown.



IT 101-37-1, s-Triazine, 2,4,6-tris(allyloxy)-
(**unsatd. ester** polymers cross-linked by,
lubricant-additive)

RN 101-37-1 HCAPLUS

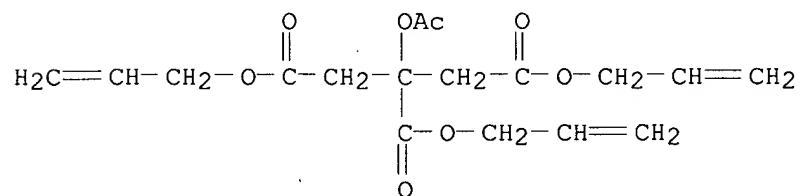
CN 1,3,5-Triazine, 2,4,6-tris(2-propenyloxy)- (9CI) (CA INDEX NAME)



IT 115-72-0, Citric acid, triallyl **ester**, acetate
(**unsatd. ester** polymers crosslinked by,
lubricant-additive)

RN 115-72-0 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-(acetyloxy)-, tri-2-propenyl ester
(9CI) (CA INDEX NAME)

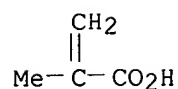


IT 79-41-4, Methacrylic acid

(with coconut oil alcs., polymers with **unsatd. esters**
with cross-linkage by allyl esters, as lubricant-additive)

RN 79-41-4 HCAPLUS

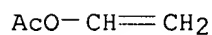
CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



IT 9003-20-7, Vinyl acetate polymers
(with **esters (unsatd.)** with cross-linkage by allyl
esters, as lubricant additive)
RN 9003-20-7 HCAPLUS
CN Acetic acid ethenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

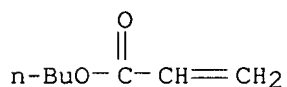
CRN 108-05-4
CMF C4 H6 O2



IT 9003-49-0, Acrylic acid, butyl **ester** polymers
(with **unsatd. esters** with cross-linkage by allyl
esters, lubricant-additive)
RN 9003-49-0 HCAPLUS
CN 2-Propenoic acid, butyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2



=> d que stat 149

L24 6 SEA FILE=REGISTRY ABB=ON (88-12-0 OR 228728-06-7 OR 23778-52-1
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 L26 7 SEA FILE=REGISTRY ABB=ON L24 OR L25
 L27 4115 SEA FILE=HCAPLUS ABB=ON L26
 L30 105 SEA FILE=HCAPLUS ABB=ON L27 AND ?UNSAT?(3A)?ESTER?
 L31 4 SEA FILE=HCAPLUS ABB=ON L30 AND ?HYDROXYL?
 L35 2 SEA FILE=HCAPLUS ABB=ON ?NONVOLATIL?(W)?REACTIV?(W)?AMINE?
 L37 2 SEA FILE=HCAPLUS ABB=ON L35 AND ?NONVOLATIL?(W)?REACTIV?(W)?AM
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 L39 5 SEA FILE=HCAPLUS ABB=ON L31 OR L37
 L41 70 SEA FILE=USPATFULL ABB=ON L39 AND (PRD<19971219 OR PD<19971219
)
 L43 7 SEA FILE=USPATFULL ABB=ON L41 AND ?HYDROXYL?(3A)(?OLIGO? OR
 ?GLYCOL?)
 L44 4 SEA FILE=USPATFULL ABB=ON L41 AND ?UNSATUR?(3A)?HYDROXYL?
 L45 11 SEA FILE=USPATFULL ABB=ON L43 OR L44
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 -1/RN OR 1
 L49 11 SEA FILE=USPATFULL ABB=ON L48 AND L45

=> d ibib abs hitstr 149 1-11

L49 ANSWER 1 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2000:88240 USPATFULL

TITLE: Polymers based on block copolymers

INVENTOR(S): Chabrecek, Peter, Clayton, Australia

Lohmann, Dieter, Munchenstein, Switzerland

Dietliker, Kurt, Fribourg, Switzerland

PATENT ASSIGNEE(S): Novartis AG, Basel, Switzerland (non-U.S. corporation)

date of key
 <--

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6087412		20000711
	WO 9621167		19960711
APPLICATION INFO.:	US 1997-860132		19970912 (8)
	WO 1995-CH309		19951227
			19970912 PCT 371 date
			19970912 PCT 102(e) date

	NUMBER	DATE	
PRIORITY INFORMATION:	CH 1994-3967	19941230	<--
	CH 1994-3968	19941230	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Berman, Susan W.		
LEGAL REPRESENTATIVE:	Meece, R. Scott, Gorman, Jr., Robert J.		
NUMBER OF CLAIMS:	15		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1773		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to crosslinked polymers, which are polymerisation products of a polymerisable mixture that comprises the following components:

a) a macromer of formula C ##STR1## wherein Macro is an m-valent radical of a macromer from which the number m of groups Rx.sub.x --H has been removed,

each R.sub.x, independently of the others, is a bond, --O--, --NR.sub.N -- or --S-- wherein R.sub.N is hydrogen or lower alkyl,

PI* is a bivalent radical of a photoinitiator,

R.sub.aa is the moiety of a photoinitiator that forms the less reactive free radical on cleavage of the photoinitiator, and

m is an integer from 1 to 100,

b) a copolymerisable vinyl monomer and

c) a copolymerisable crosslinker.

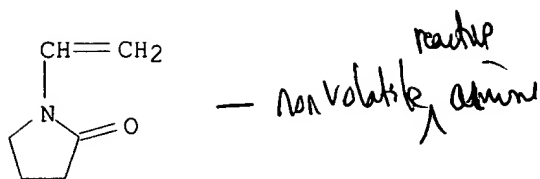
The polymers are suitable especially for the production of mouldings, such as for contact lenses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

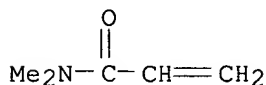
IT **88-12-ODP**, graft polymers with hydrogen siloxane-cured polybutadiene **2680-03-7DP**, N,N-Dimethylacrylamide, graft polymers with hydrogen siloxane-cured polybutadiene **9003-17-2DP**, Polybutadiene, reaction products with hydrogen siloxanes, vinyl monomer-grafted **31567-90-5DP**, Syndiotactic polybutadiene, reaction products with hydrogen siloxanes, vinyl monomer-grafted (preparation and uses of transparent crosslinked)

RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



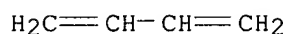
RN 2680-03-7 USPATFULL
 CN 2-Propenamide, N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 9003-17-2 USPATFULL
 CN 1,3-Butadiene, homopolymer (9CI) (CA INDEX NAME)

CM 1

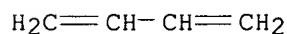
CRN 106-99-0
 CMF C4 H6



RN 31567-90-5 USPATFULL
 CN 1,3-Butadiene, homopolymer, syndiotactic (9CI) (CA INDEX NAME)

CM 1

CRN 106-99-0
 CMF C4 H6



L49 ANSWER 2 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 97:112664 USPATFULL
 TITLE: Production of silicon-phosphorus containing compositions
 INVENTOR(S): Blount, David H., 6728 Del Cerro Blvd., San Diego, CA, United States 92120

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5693840		19971202
APPLICATION INFO.:	US 1996-680651		19960716 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-160176, filed on 2 Dec 1993, now patented, Pat. No. US 5563285		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Shaver, Paul F.		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		

LINE COUNT: 1025

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A mixture of silicon and phosphorus are heated and reacted with halide to produce silicon tetrahalides, silicon-phosphorus halide and phosphorus trihalides compositions. These compositions are reacted with any suitable organic, inorganic-organic and/or inorganic compound to produce novel organic silicon-phosphorus containing compositions. These compositions may be utilized as flame retardants, coating agents, adhesives and many other uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 9005-32-7, Alginic acid

(production of organic silicon-phosphorus containing compns. flame retardants and

hydraulic fluid and building components and coating agent and adhesives)

RN 9005-32-7 USPATFULL

CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

IT 67-56-1, Methanol, reactions 67-63-0, 2-Propanol
67-64-1, 2-Propanone, reactions 71-23-8, 1-Propanol,
reactions 71-36-3, 1-Butanol, reactions 74-86-2,
Ethyne, reactions 74-87-3 74-93-1, Methanethiol,
reactions 75-07-0, Acetaldehyde, reactions 75-12-7,
Formamide, reactions 75-15-0, Carbon disulfide, reactions
75-21-8, Oxirane, reactions 75-56-9 75-87-6
78-51-3 78-79-5 78-83-1 78-90-0,
1,2-Propanediamine 79-09-4, Propanoic acid, reactions
79-10-7, 2-Propenoic acid, reactions 79-41-4
85-44-9, 1,3-Isobenzofurandione 88-12-0 88-99-3
, 1,2-Benzenedicarboxylic acid, reactions 96-24-2
98-00-0, 2-Furanmethanol 98-01-1, 2-
Furancarboxaldehyde, reactions 100-52-7, Benzaldehyde,
reactions 105-60-2 106-88-7 106-89-8
106-92-3 106-99-0, 1,3-Butadiene, reactions
107-02-8, 2-Propenal, reactions 107-10-8,
1-Propanamine, reactions 107-13-1, 2-Propenenitrile, reactions
107-18-6, 2-Propen-1-ol, reactions 107-19-7,
2-Propyn-1-ol 107-21-1, 1,2-Ethanediol, reactions
108-05-4, Acetic acid ethenyl ester, reactions 108-30-5
108-31-6, 2,5-Furandione, reactions 108-78-1,
1,3,5-Triazine-2,4,6-triamine, reactions 108-95-2, Phenol,
reactions 109-53-5 110-15-6, Butanedioic acid,
reactions 110-16-7, 2-Butenedioic acid (2Z)-, reactions
110-17-8, 2-Butenedioic acid (2E)-, reactions 110-63-4,
1,4-Butanediol, reactions 111-20-6, Decanedioic acid, reactions
111-40-0 111-46-6 121-44-8 122-60-1
123-72-8, Butanal 123-99-9, Nonanedioic acid, reactions
124-04-9, Hexanedioic acid, reactions 124-09-4,
1,6-Hexanediamine, reactions 126-99-8 461-58-5
503-09-3 593-74-8 676-58-4 868-85-9
930-27-8 1321-11-5 1344-08-7, Sodium sulfide
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3068-00-6, 1,2,4-Butanetriol 3132-64-7
3586-58-1 4170-30-3, 2-Butenal 4436-24-2
5329-14-6, Sulfamic acid 7439-95-4, Magnesium,
reactions 7440-21-3, Silicon 7440-66-6, Zinc
7664-38-2, Phosphoric acid, reactions 7719-12-2,
Phosphorous trichloride 7723-14-0, Phosphorus, reactions

7782-50-5, Chlorine, reactions 9002-89-5
 9004-34-6, Cellulose, reactions 10025-87-3, Phosphoric
 trichloride, reactions 10026-04-7 10043-22-8
 15347-57-6 25068-38-6 25322-69-4
 26471-62-5 26545-55-1, Propanediamine
 26764-44-3 30525-89-4, Paraformaldehyde
 30899-19-5, Pentanol 35898-62-5 91717-85-0,
 1,2,10-Decanetriol

(production of organic silicon-phosphorus containing compns. flame
 retardants and
 hydraulic fluid and building components and coating agents and
 adhesives)

RN 67-56-1 USPATFULL
 CN Methanol (8CI, 9CI) (CA INDEX NAME)

$\text{H}_3\text{C}-\text{OH}$

RN 67-63-0 USPATFULL
 CN 2-Propanol (9CI) (CA INDEX NAME)

$\begin{array}{c} \text{OH} \\ | \\ \text{H}_3\text{C}-\text{CH}-\text{CH}_3 \end{array}$

RN 67-64-1 USPATFULL
 CN 2-Propanone (9CI) (CA INDEX NAME)

$\begin{array}{c} \text{O} \\ || \\ \text{H}_3\text{C}-\text{C}-\text{CH}_3 \end{array}$

RN 71-23-8 USPATFULL
 CN 1-Propanol (9CI) (CA INDEX NAME)

$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{OH}$

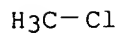
RN 71-36-3 USPATFULL
 CN 1-Butanol (9CI) (CA INDEX NAME)

$\text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH}$

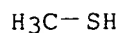
RN 74-86-2 USPATFULL
 CN Ethyne (9CI) (CA INDEX NAME)

$\text{HC}\equiv\text{CH}$

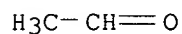
RN 74-87-3 USPATFULL
 CN Methane, chloro- (8CI, 9CI) (CA INDEX NAME)



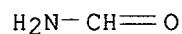
RN 74-93-1 USPATFULL
 CN Methanethiol (8CI, 9CI) (CA INDEX NAME)



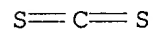
RN 75-07-0 USPATFULL
 CN Acetaldehyde (8CI, 9CI) (CA INDEX NAME)



RN 75-12-7 USPATFULL
 CN Formamide (8CI, 9CI) (CA INDEX NAME)



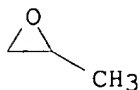
RN 75-15-0 USPATFULL
 CN Carbon disulfide (8CI, 9CI) (CA INDEX NAME)



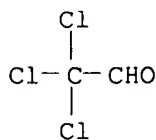
RN 75-21-8 USPATFULL
 CN Oxirane (9CI) (CA INDEX NAME)



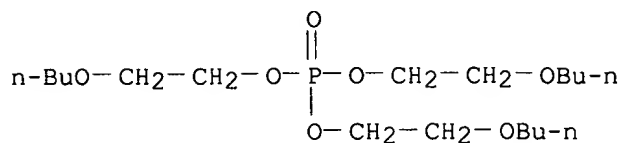
RN 75-56-9 USPATFULL
 CN Oxirane, methyl- (9CI) (CA INDEX NAME)



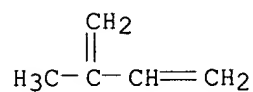
RN 75-87-6 USPATFULL
 CN Acetaldehyde, trichloro- (9CI) (CA INDEX NAME)



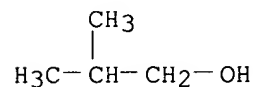
RN 78-51-3 USPATFULL
 CN Ethanol, 2-butoxy-, phosphate (3:1) (7CI, 8CI, 9CI) (CA INDEX NAME)



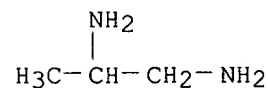
RN 78-79-5 USPATFULL
 CN 1,3-Butadiene, 2-methyl- (9CI) (CA INDEX NAME)



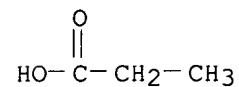
RN 78-83-1 USPATFULL
 CN 1-Propanol, 2-methyl- (9CI) (CA INDEX NAME)



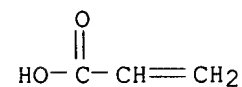
RN 78-90-0 USPATFULL
 CN 1,2-Propanediamine (7CI, 8CI, 9CI) (CA INDEX NAME)



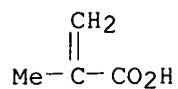
RN 79-09-4 USPATFULL
 CN Propanoic acid (9CI) (CA INDEX NAME)



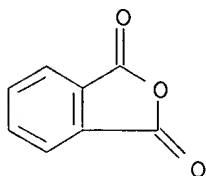
RN 79-10-7 USPATFULL
 CN 2-Propenoic acid (9CI) (CA INDEX NAME)



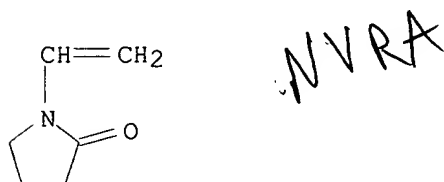
RN 79-41-4 USPATFULL
 CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



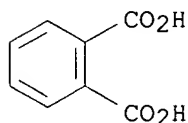
RN 85-44-9 USPATFULL
CN 1,3-Isobenzofurandione (9CI) (CA INDEX NAME)



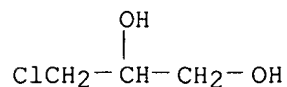
RN 88-12-0 USPATFULL
CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



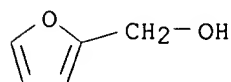
RN 88-99-3 USPATFULL
CN 1,2-Benzenedicarboxylic acid (9CI) (CA INDEX NAME)



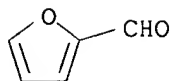
RN 96-24-2 USPATFULL
CN 1,2-Propanediol, 3-chloro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



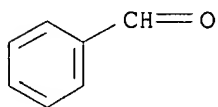
RN 98-00-0 USPATFULL
CN 2-Furanmethanol (9CI) (CA INDEX NAME)



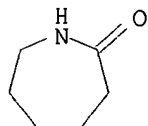
RN 98-01-1 USPATFULL
CN 2-Furancarboxaldehyde (9CI) (CA INDEX NAME)



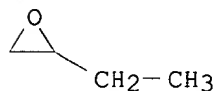
RN 100-52-7 USPATFULL
CN Benzaldehyde (7CI, 8CI, 9CI) (CA INDEX NAME)



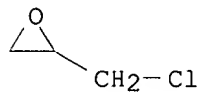
RN 105-60-2 USPATFULL
CN 2H-Azepin-2-one, hexahydro- (8CI, 9CI) (CA INDEX NAME)



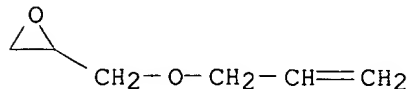
RN 106-88-7 USPATFULL
CN Oxirane, ethyl- (9CI) (CA INDEX NAME)



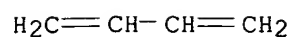
RN 106-89-8 USPATFULL
CN Oxirane, (chloromethyl)- (9CI) (CA INDEX NAME)



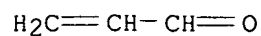
RN 106-92-3 USPATFULL
CN Oxirane, [(2-propenyloxy)methyl]- (9CI) (CA INDEX NAME)



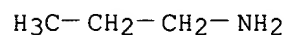
RN 106-99-0 USPATFULL
CN 1,3-Butadiene (8CI, 9CI) (CA INDEX NAME)



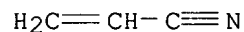
RN 107-02-8 USPATFULL
CN 2-Propenal (9CI) (CA INDEX NAME)



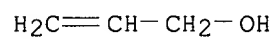
RN 107-10-8 USPATFULL
CN 1-Propanamine (9CI) (CA INDEX NAME)



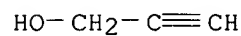
RN 107-13-1 USPATFULL
CN 2-Propenenitrile (9CI) (CA INDEX NAME)



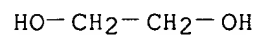
RN 107-18-6 USPATFULL
CN 2-Propen-1-ol (9CI) (CA INDEX NAME)



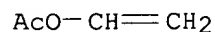
RN 107-19-7 USPATFULL
CN 2-Propyn-1-ol (8CI, 9CI) (CA INDEX NAME)



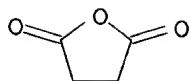
RN 107-21-1 USPATFULL
CN 1,2-Ethanediol (9CI) (CA INDEX NAME)



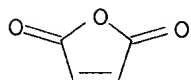
RN 108-05-4 USPATFULL
CN Acetic acid ethenyl ester (9CI) (CA INDEX NAME)



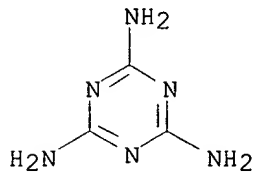
RN 108-30-5 USPATFULL
CN 2,5-Furandione, dihydro- (9CI) (CA INDEX NAME)



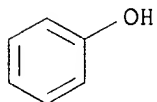
RN 108-31-6 USPATFULL
CN 2,5-Furandione (9CI) (CA INDEX NAME)



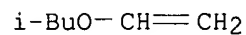
RN 108-78-1 USPATFULL
CN 1,3,5-Triazine-2,4,6-triamine (9CI) (CA INDEX NAME)



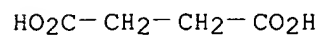
RN 108-95-2 USPATFULL
CN Phenol (8CI, 9CI) (CA INDEX NAME)



RN 109-53-5 USPATFULL
CN Propane, 1-(ethenyloxy)-2-methyl- (9CI) (CA INDEX NAME)

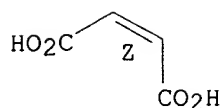


RN 110-15-6 USPATFULL
CN Butanedioic acid (9CI) (CA INDEX NAME)



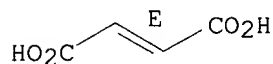
RN 110-16-7 USPATFULL
CN 2-Butenedioic acid (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

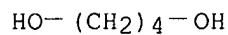


RN 110-17-8 USPATFULL
CN 2-Butenedioic acid (2E)- (9CI) (CA INDEX NAME)

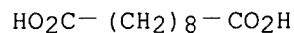
Double bond geometry as shown.



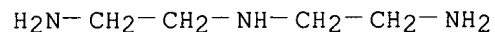
RN 110-63-4 USPATFULL
CN 1,4-Butanediol (8CI, 9CI) (CA INDEX NAME)



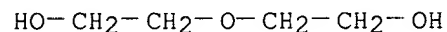
RN 111-20-6 USPATFULL
CN Decanedioic acid (9CI) (CA INDEX NAME)



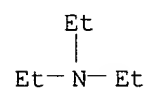
RN 111-40-0 USPATFULL
CN 1,2-Ethanediamine, N-(2-aminoethyl)- (9CI) (CA INDEX NAME)



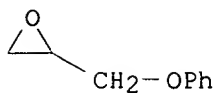
RN 111-46-6 USPATFULL
CN Ethanol, 2,2'-oxybis- (9CI) (CA INDEX NAME)



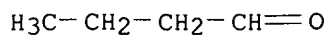
RN 121-44-8 USPATFULL
CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)



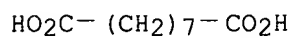
RN 122-60-1 USPATFULL
CN Oxirane, (phenoxymethyl)- (9CI) (CA INDEX NAME)



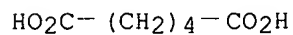
RN 123-72-8 USPATFULL
CN Butanal (9CI) (CA INDEX NAME)



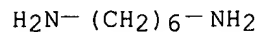
RN 123-99-9 USPATFULL
CN Nonanedioic acid (9CI) (CA INDEX NAME)



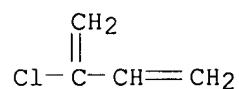
RN 124-04-9 USPATFULL
CN Hexanedioic acid (9CI) (CA INDEX NAME)



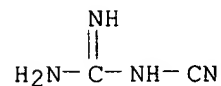
RN 124-09-4 USPATFULL
CN 1,6-Hexanediamine (7CI, 8CI, 9CI) (CA INDEX NAME)



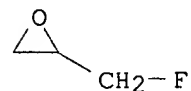
RN 126-99-8 USPATFULL
CN 1,3-Butadiene, 2-chloro- (8CI, 9CI) (CA INDEX NAME)



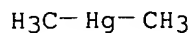
RN 461-58-5 USPATFULL
CN Guanidine, cyano- (8CI, 9CI) (CA INDEX NAME)



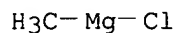
RN 503-09-3 USPATFULL
CN Oxirane, (fluoromethyl)- (9CI) (CA INDEX NAME)



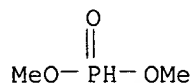
RN 593-74-8 USPATFULL
CN Mercury, dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



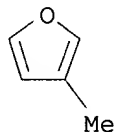
RN 676-58-4 USPATFULL
CN Magnesium, chloromethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



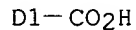
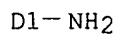
RN 868-85-9 USPATFULL
CN Phosphonic acid, dimethyl ester (8CI, 9CI) (CA INDEX NAME)



RN 930-27-8 USPATFULL
CN Furan, 3-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



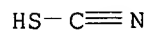
RN 1321-11-5 USPATFULL
CN Benzoic acid, amino- (8CI, 9CI) (CA INDEX NAME)



RN 1344-08-7 USPATFULL
CN Sodium sulfide ($\text{Na}_2(\text{Sx})$) (9CI) (CA INDEX NAME)

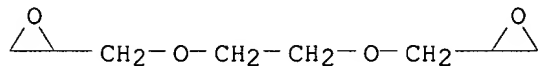
STRUCTURE DIAGRAM IS NOT AVAILABLE

RN 1762-95-4 USPATFULL
CN Thiocyanic acid, ammonium salt (8CI, 9CI) (CA INDEX NAME)



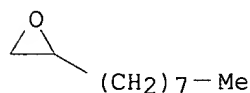
RN 2224-15-9 USPATFULL

CN Oxirane, 2,2'-[1,2-ethanediylbis(oxyethylene)]bis- (9CI) (CA INDEX NAME)



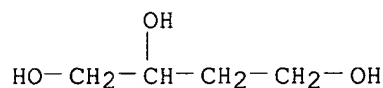
RN 2404-44-6 USPATFULL

CN Oxirane, octyl- (9CI) (CA INDEX NAME)



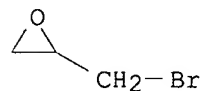
RN 3068-00-6 USPATFULL

CN 1,2,4-Butanetriol (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



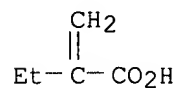
RN 3132-64-7 USPATFULL

CN Oxirane, (bromomethyl)- (9CI) (CA INDEX NAME)



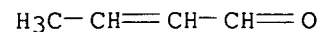
RN 3586-58-1 USPATFULL

CN Butanoic acid, 2-methylene- (9CI) (CA INDEX NAME)



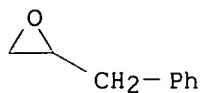
RN 4170-30-3 USPATFULL

CN 2-Butenal (9CI) (CA INDEX NAME)



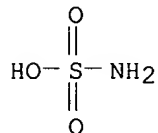
RN 4436-24-2 USPATFULL

CN Oxirane, (phenylmethyl)- (9CI) (CA INDEX NAME)



RN 5329-14-6 USPATFULL

CN Sulfamic acid (8CI, 9CI) (CA INDEX NAME)



RN 7439-95-4 USPATFULL

CN Magnesium (8CI, 9CI) (CA INDEX NAME)

Mg

RN 7440-21-3 USPATFULL

CN Silicon (7CI, 8CI, 9CI) (CA INDEX NAME)

Si

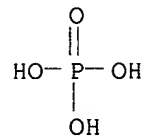
RN 7440-66-6 USPATFULL

CN Zinc (7CI, 8CI, 9CI) (CA INDEX NAME)

Zn

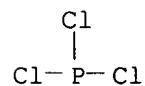
RN 7664-38-2 USPATFULL

CN Phosphoric acid (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 7719-12-2 USPATFULL

CN Phosphorous trichloride (9CI) (CA INDEX NAME)



RN 7723-14-0 USPATFULL
CN Phosphorus (8CI, 9CI) (CA INDEX NAME)

P

RN 7782-50-5 USPATFULL
CN Chlorine (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Cl-Cl

RN 9002-89-5 USPATFULL
CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

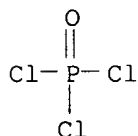
CRN 557-75-5
CMF C2 H4 O

$\text{H}_2\text{C}=\text{CH}-\text{OH}$

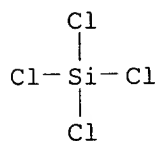
RN 9004-34-6 USPATFULL
CN Cellulose (8CI, 9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

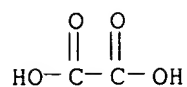
RN 10025-87-3 USPATFULL
CN Phosphoric trichloride (9CI) (CA INDEX NAME)



RN 10026-04-7 USPATFULL
CN Silane, tetrachloro- (9CI) (CA INDEX NAME)



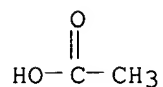
RN 10043-22-8 USPATFULL
CN Ethanedioic acid, potassium salt (9CI) (CA INDEX NAME)



●x K

RN 15347-57-6 USPATFULL

CN Acetic acid, lead salt (8CI, 9CI) (CA INDEX NAME)



●x Pb(x)

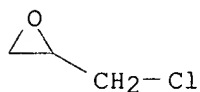
RN 25068-38-6 USPATFULL

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

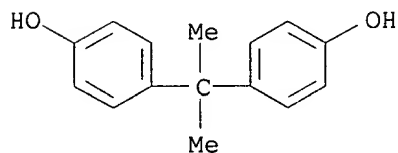
CMF C3 H5 Cl O



CM 2

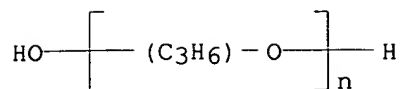
CRN 80-05-7

CMF C15 H16 O2



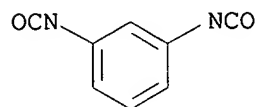
RN 25322-69-4 USPATFULL

CN Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-ω-hydroxy- (9CI)
(CA INDEX NAME)



RN 26471-62-5 USPATFULL

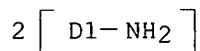
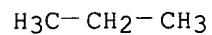
CN Benzene, 1,3-diisocyanatomethyl- (9CI) (CA INDEX NAME)



D1-Me

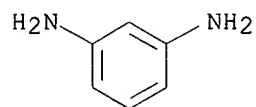
RN 26545-55-1 USPATFULL

CN Propanediamine (8CI, 9CI) (CA INDEX NAME)



RN 26764-44-3 USPATFULL

CN 1,3-Benzenediamine, ar-methyl- (9CI) (CA INDEX NAME)



D1-Me

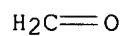
RN 30525-89-4 USPATFULL

CN Paraformaldehyde (9CI) (CA INDEX NAME)

CM 1

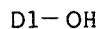
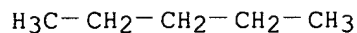
CRN 50-00-0

CMF C H2 O



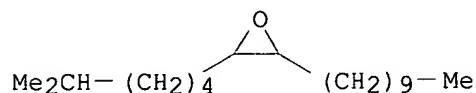
RN 30899-19-5 USPATFULL

CN Pentanol (8CI, 9CI) (CA INDEX NAME)



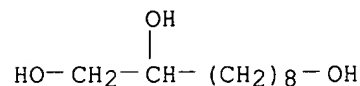
RN 35898-62-5 USPATFULL

CN Oxirane, 2-decyl-3-(5-methylhexyl)- (9CI) (CA INDEX NAME)



RN 91717-85-0 USPATFULL

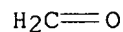
CN 1,2,10-Decanetriol (7CI, 9CI) (CA INDEX NAME)



IT 50-00-0, Formaldehyde, reactions 50-81-7, L-Ascorbic acid, reactions 56-40-6, Glycine, reactions 56-81-5, 1,2,3-Propanetriol, reactions 57-13-6, Urea, reactions 57-55-6, 1,2-Propanediol, reactions 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, reactions 62-53-3, Benzenamine, reactions 62-56-6, Thiourea, reactions 64-17-5, Ethanol, reactions 64-19-7, Acetic acid, reactions 65-85-0, Benzoic acid, reactions (production of organic silicon-phosphorus containing compns. for flame retardants and hydraulic fluid and building components and coating agents and adhesives)

RN 50-00-0 USPATFULL

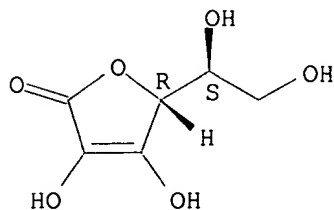
CN Formaldehyde (8CI, 9CI) (CA INDEX NAME)



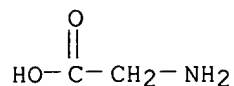
RN 50-81-7 USPATFULL

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

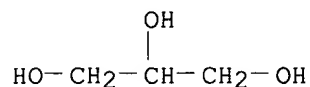
Absolute stereochemistry.



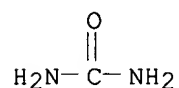
RN 56-40-6 USPATFULL
CN Glycine (8CI, 9CI) (CA INDEX NAME)



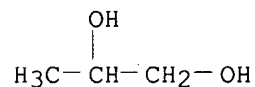
RN 56-81-5 USPATFULL
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 57-13-6 USPATFULL
CN Urea (8CI, 9CI) (CA INDEX NAME)

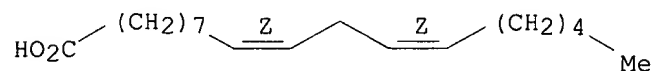


RN 57-55-6 USPATFULL
CN 1,2-Propanediol (8CI, 9CI) (CA INDEX NAME)

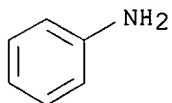


RN 60-33-3 USPATFULL
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 62-53-3 USPATFULL
CN Benzenamine (9CI) (CA INDEX NAME)



RN 62-56-6 USPATFULL
CN Thiourea (9CI) (CA INDEX NAME)

LEGAL REPRESENTATIVE: Wenderoth, Lind & Ponack

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1

LINE COUNT: 1266

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cationic electrodeposition coating composition comprising

[A] a neutralization product or a quaternary ammonium salt of a comb-shaped copolymer obtained by copolymerizing (a) 3 to 90 parts by weight of an ethylenically unsaturated monomer having a hydrocarbon chain with at least 8 carbon atoms at the molecular ends, (b) 1 to 50 parts by weight of at least one cationic (meth)acrylic monomer selected from the group consisting of aminoalkyl (meth)acrylates, aminoalkyl (meth)acrylamides (meth)acrylates containing a quaternary ammonium salt group and (meth)acrylamides containing a quaternary ammonium salt group, (c) 1 to 60 parts by weight of an alpha,beta-ethylenically unsaturated monomer other than the monomer (b), and (d) 0 to 95 parts by weight of an alpha,beta-ethylenically unsaturated monomer other than the monomers (a), (b) and (c),

[B] a cationic epoxy resin capable of being dissolved or dispersed in water, and

[C] a pigment.

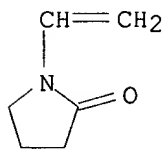
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 88-12-0D, comb copolymers 103-11-7D, comb copolymers 106-91-2D, Glycidyl methacrylate, reaction products with safflower oil fatty acids, comb copolymers 141-32-2D, comb copolymers 143-28-2D, Oleyl alcohol, reaction products with TDI and hydroxyethyl methacrylate, comb copolymers 868-77-9D, reaction products with TDI and oleyl alc., comb copolymers 2680-03-7D, N,N-Dimethylacrylamide, comb copolymers 2867-47-2D, comb copolymers 3845-76-9D, N,N-Dimethylaminopropylacrylamide, comb copolymers 6498-81-3D, reaction products with linseed oil fatty acids, comb copolymers 26471-62-5D, TDI, reaction products with hydroxyethyl methacrylate and oleyl alc., comb copolymers 32360-05-7D, comb copolymers

(cationic epoxy electrophoretic coating materials containing, anticorrosive, weather-resistant)

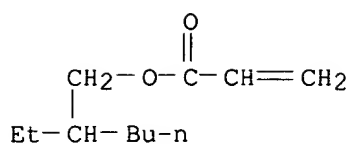
RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



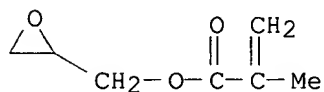
RN 103-11-7 USPATFULL

CN 2-Propenoic acid, 2-ethylhexyl ester (9CI) (CA INDEX NAME)



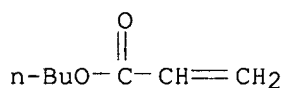
RN 106-91-2 USPATFULL

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester (9CI) (CA INDEX NAME)



RN 141-32-2 USPATFULL

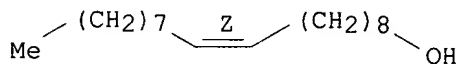
CN 2-Propenoic acid, butyl ester (9CI) (CA INDEX NAME)



RN 143-28-2 USPATFULL

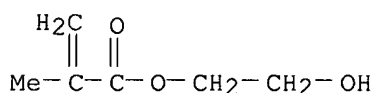
CN 9-Octadecen-1-ol, (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



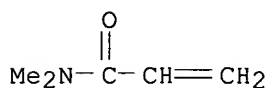
RN 868-77-9 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



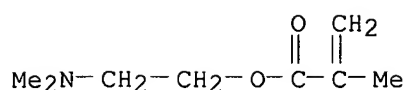
RN 2680-03-7 USPATFULL

CN 2-Propenamide, N,N-dimethyl- (9CI) (CA INDEX NAME)

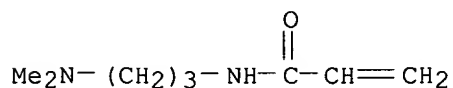


RN 2867-47-2 USPATFULL

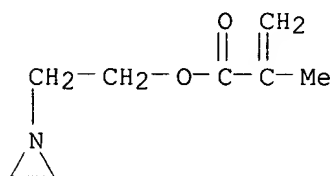
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)



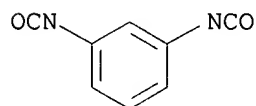
RN 3845-76-9 USPATFULL
 CN 2-Propenamide, N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



RN 6498-81-3 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, 2-(1-aziridinyl)ethyl ester (9CI) (CA INDEX NAME)

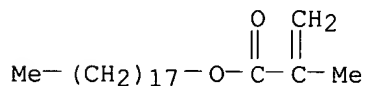


RN 26471-62-5 USPATFULL
 CN Benzene, 1,3-diisocyanatomethyl- (9CI) (CA INDEX NAME)

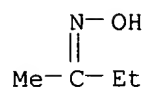


D1-Me

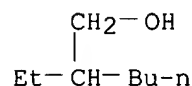
RN 32360-05-7 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, octadecyl ester (9CI) (CA INDEX NAME)



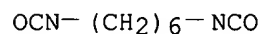
IT 96-29-7D, MEK oxime, polyisocyanates blocked by 104-76-7D
 , 2-Ethylhexanol, polyisocyanates blocked by 822-06-0D, blocked
 4098-71-9D, IPDI, blocked 39278-79-0D, Coronate L,
 blocked
 (cationic epoxy electrophoretic coatings containing comb copolymers and,
 anticorrosive, weather-resistant)
 RN 96-29-7 USPATFULL
 CN 2-Butanone, oxime (6CI, 8CI, 9CI) (CA INDEX NAME)



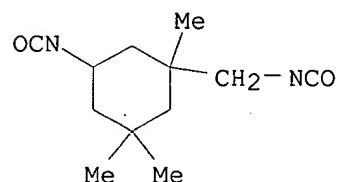
RN 104-76-7 USPATFULL
CN 1-Hexanol, 2-ethyl- (8CI, 9CI) (CA INDEX NAME)



RN 822-06-0 USPATFULL
CN Hexane, 1,6-diisocyanato- (9CI) (CA INDEX NAME)



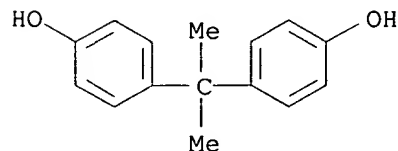
RN 4098-71-9 USPATFULL
CN Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



RN 39278-79-0 USPATFULL
CN Coronate L (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

IT 80-05-7D, cationic epoxy resin derivs. 103-83-3D,
Dimethylbenzylamine, cationic epoxy resin derivs. 109-89-7D,
Diethylamine, cationic epoxy resin derivs. 111-42-2D,
Diethanolamine, cationic epoxy resin derivs. 502-44-3D,
2-Oxepanone, cationic epoxy resin derivs. 10595-60-5D, cationic
epoxy resin derivs.
(coatings, electrophoretic, containing comb copolymers and polyisocyanate,
anticorrosive, weather-resistant)
RN 80-05-7 USPATFULL
CN Phenol, 4,4'-(1-methylethylidene)bis- (9CI) (CA INDEX NAME)



RN 103-83-3 USPATFULL

CN Benzenemethanamine, N,N-dimethyl- (9CI) (CA INDEX NAME)

$\text{Me}_2\text{N}-\text{CH}_2-\text{Ph}$

RN 109-89-7 USPATFULL

CN Ethanamine, N-ethyl- (9CI) (CA INDEX NAME)

$\text{H}_3\text{C}-\text{CH}_2-\text{NH}-\text{CH}_2-\text{CH}_3$

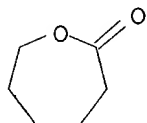
RN 111-42-2 USPATFULL

CN Ethanol, 2,2'-iminobis- (9CI) (CA INDEX NAME)

$\text{HO}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{CH}_2-\text{CH}_2-\text{OH}$

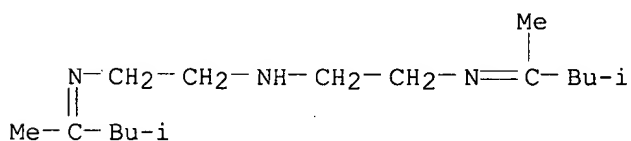
RN 502-44-3 USPATFULL

CN 2-Oxepanone (8CI, 9CI) (CA INDEX NAME)



RN 10595-60-5 USPATFULL

CN 1,2-Ethanediamine, N-(1,3-dimethylbutylidene)-N'-[2-[(1,3-dimethylbutylidene)amino]ethyl]- (9CI) (CA INDEX NAME)



IT 25068-38-6D, Bisphenol A-epichlorohydrin copolymer, cationic derivs.

(coatings, electrophoretic, containing comb copolymers and polyisocyanate, anticorrosive, weather-resistant)

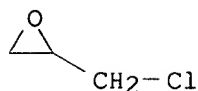
RN 25068-38-6 USPATFULL

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 106-89-8

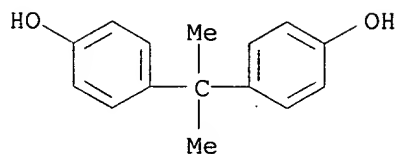
CMF C3 H5 Cl O



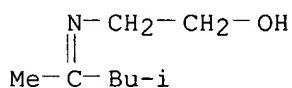
CM 2

CRN 80-05-7

CMF C15 H16 O2



IT 32781-30-9D, cationic epoxy resin derivs. 128771-71-1D,
 XB 4122, cationic derivs.
 (coatings, electrophoretic, containing comb copolymers and polyisocyanate,
 anticorrosive, weather-resistant)
 RN 32781-30-9 USPATFULL
 CN Ethanol, 2-[(1,3-dimethylbutylidene)amino]- (7CI, 8CI, 9CI) (CA INDEX
 NAME)



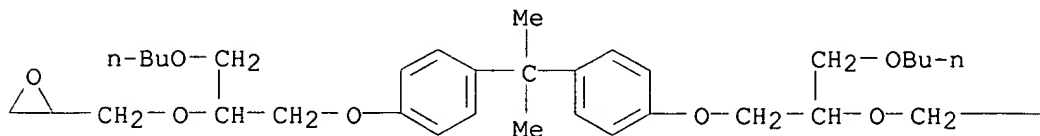
RN 128771-71-1 USPATFULL
 CN Oxirane, 2,2'-[(1-methylethylidene)bis[4,1-phenyleneoxy[1-(butoxymethyl)-
 2,1-ethanediyl]oxymethylene]]bis-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 71033-08-4

CMF C35 H52 O8

PAGE 1-A

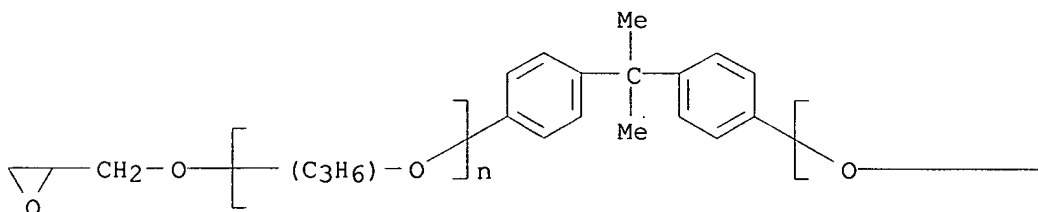


PAGE 1-B

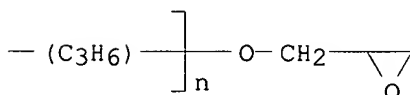


IT 11121-15-6D, cationic derivs.
 (coatings, electrophoretic, containing comb copolymers and polyisocyanates,
 anticorrosive, weather-resistant)
 RN 11121-15-6 USPATFULL
 CN Poly[oxy(methyl-1,2-ethanediyl)], α,α' -[(1-methylethylidene)di-
 4,1-phenylene]bis[ω -(oxiranylmethoxy)-, homopolymer (9CI) (CA
 INDEX NAME)
 CM 1
 CRN 55236-42-5
 CMF (C3 H6 O)_n (C3 H6 O)_n C21 H24 O4
 CCI IDS, PMS
 CDES 8:ID

PAGE 1-A



PAGE 1-B



L49 ANSWER 4 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 91:58850 USPATFULL
 TITLE: Process for the photographic production of relief
 images using selected titanocenes
 INVENTOR(S): Riediker, Martin, Riehen, Switzerland
 Steiner, Eginhard, Fullinsdorf, Switzerland
 Beyeler, Harry, Basle, Switzerland
 Rembold, Manfred, Aesch, Switzerland
 Sitek, Francissek, Therwil, Switzerland
 PATENT ASSIGNEE(S): Ciba-Geigy Corporation, Ardsley, NY, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5034307		19910723 <--
APPLICATION INFO.:	US 1990-570497		19900821 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1989-361194, filed on 5 Jun 1989, now patented, Pat. No. US 4970136 which is a division of Ser. No. US 1987-77261, filed on 24 Jul		

1987, now patented, Pat. No. US 4857654, issued on 15
Aug 1989

	NUMBER	DATE	
	-----	-----	
PRIORITY INFORMATION:	CH 1986-3101	19860801	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Hamilton, Cynthia		
LEGAL REPRESENTATIVE:	Hall, Luther A. R.		
NUMBER OF CLAIMS:	13		
EXEMPLARY CLAIM:	1		
LINE COUNT:	804		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

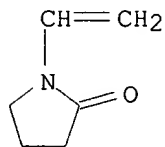
AB Titanocenes with, for example, π -cyclopentadienyl ligands in which one or two carbo- or heterocyclic aromatic rings are bonded to the titanium, the aromatic rings being substituted by fluorine in at least one of the two ortho-positions relative to the metal-carbon bond and being substituted by at least one free or etherified or esterified polyoxaalkylene radical, are suitable as photoinitiators for the photopolymerization of ethylenically unsaturated substrates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 88-12-0, N-Vinylpyrrolidone, reactions 548-62-9,
Crystal violet 15625-89-5 25213-61-0
26570-48-9, Polyethylene glycol diacrylate 42978-66-5,
Tripropylene glycol diacrylate
(photopolymn. of, titanocenes as catalyst for)

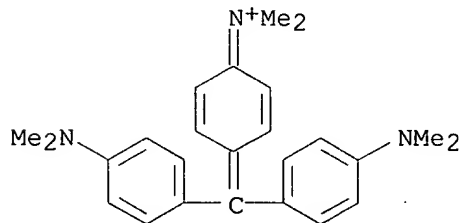
RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



RN 548-62-9 USPATFULL

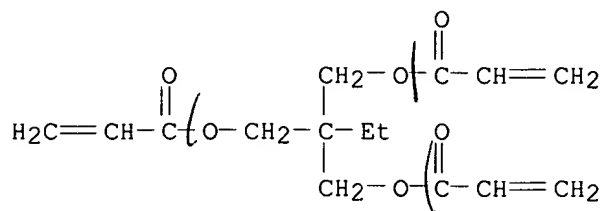
CN Methanaminium, N-[4-[bis(4-(dimethylamino)phenyl)methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 15625-89-5 USPATFULL

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



unsaturated ester.

RN 25213-61-0 USPATFULL

CN 2-Butenedioic acid (2Z)-, monomethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

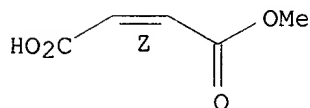
CM 1

CRN 3052-50-4

CMF C5 H6 O4

CDES 2:Z

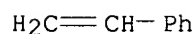
Double bond geometry as shown.



CM 2

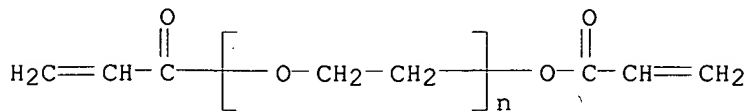
CRN 100-42-5

CMF C8 H8



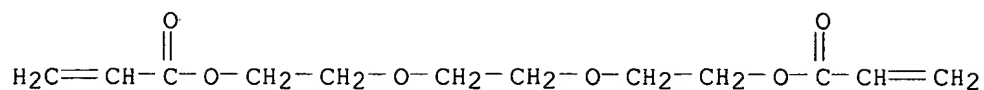
RN 26570-48-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)



RN 42978-66-5 USPATFULL

CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester (9CI) (CA INDEX NAME)



3 (D1-Me)

IT 83855-36-1

(photopolymn. of, titanocenes as catalysts for)

RN 83855-36-1 USPATFULL

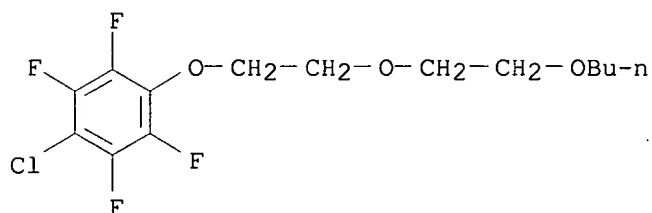
CN Actilane AJ 20 (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

IT 114458-39-8P

(preparation and metalation of)

RN 114458-39-8 USPATFULL

CN Benzene, 1-[2-(2-butoxyethoxy)ethoxy]-4-chloro-2,3,5,6-tetrafluoro- (9CI)
(CA INDEX NAME)

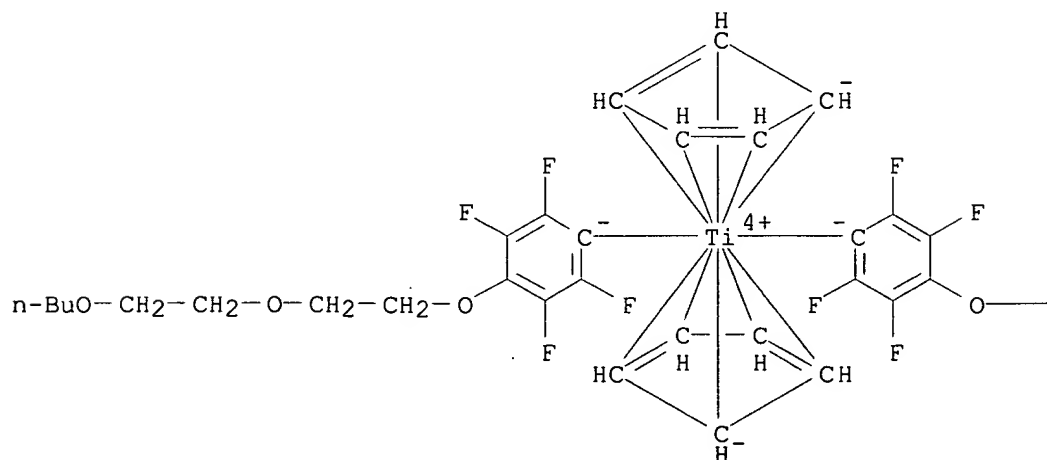
IT 114348-18-4P 114348-19-5P 114348-20-8P

(preparation of, as photopolymn. catalyst)

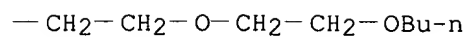
RN 114348-18-4 USPATFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis(η⁵-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



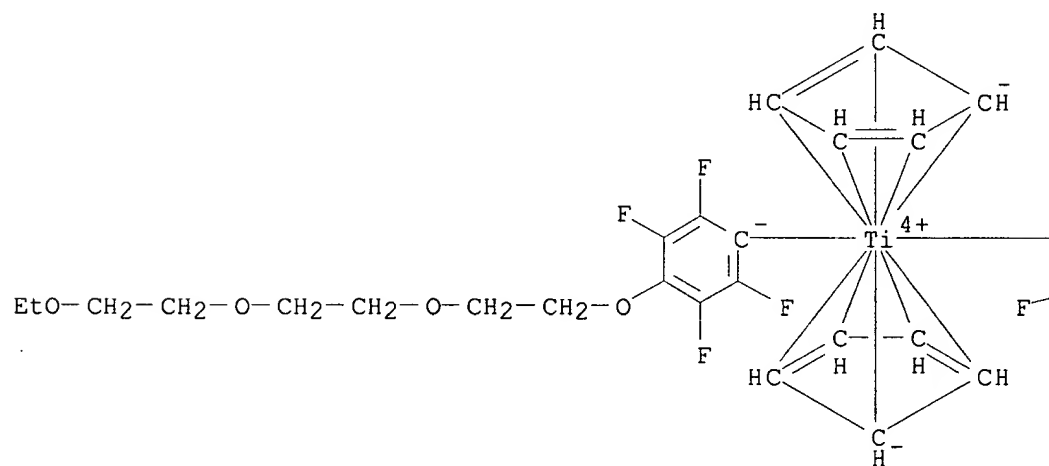
PAGE 1-B



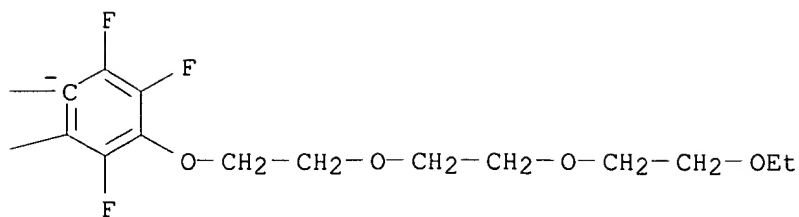
RN 114348-19-5 USPATFULL

CN Titanium, bis(η^5 -2,4-cyclopentadien-1-yl)bis[4-[2-[2-(2-ethoxyethoxy)ethoxy]ethoxy]-2,3,5,6-tetrafluorophenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



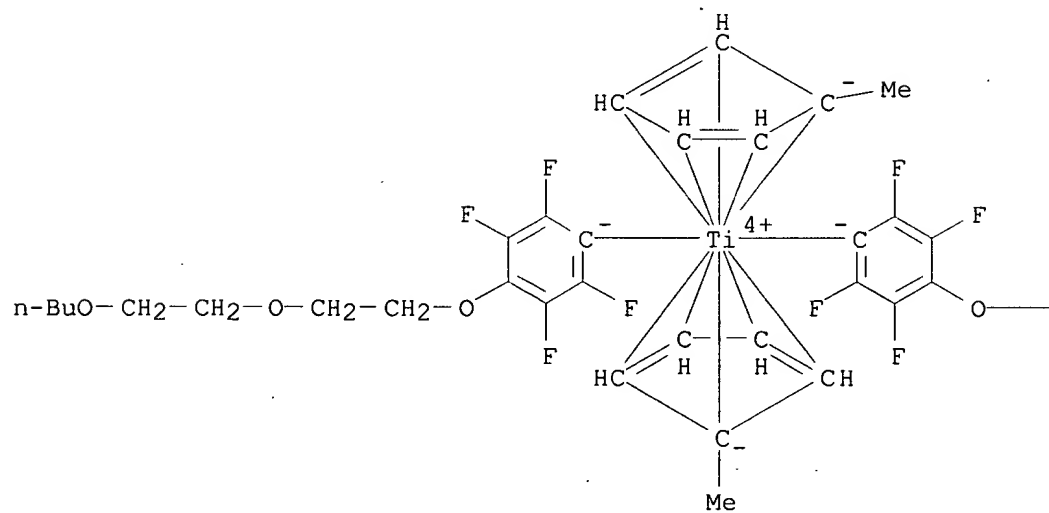
PAGE 1-B



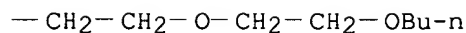
RN 114348-20-8 USPATFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis[(1,2,3,4,5- η)-1-methyl-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

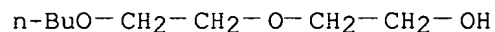


IT 112-34-5

(reaction of, with chloropentafluorobenzene)

RN 112-34-5 USPATFULL

CN Ethanol, 2-(2-butoxyethoxy)- (8CI, 9CI) (CA INDEX NAME)

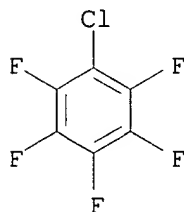


IT 344-07-0, Chloropentafluorobenzene

(reaction of, with diethylene glycol monobutyl ether)

RN 344-07-0 USPATFULL

CN Benzene, chloropentafluoro- (6CI, 8CI, 9CI) (CA INDEX NAME)

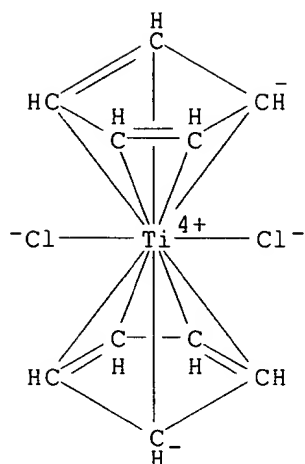


IT 1271-19-8, Bis(cyclopentadienyl)titanium dichloride

(reaction of, with glycol ethers)

RN 1271-19-8 USPATFULL

CN Titanium, dichlorobis.(η^5 -2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)



L49 ANSWER 5 OF 11 USPATFULL on STN

ACCESSION NUMBER: 90:87268 USPATFULL

TITLE: Titanocenes and their use

INVENTOR(S): Riediker, Martin, Riehen, Switzerland
 Steiner, Eginhard, Fullinsdorf, Switzerland
 Beyeler, Harry, Basel, Switzerland
 Rembold, Manfred, Aesch, Switzerland

PATENT ASSIGNEE(S): Sitek, Franciszek, Therwil, Switzerland
 Ciba-Geigy Corporation, Ardsley, NY, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4970136		19901113 <--
APPLICATION INFO.:	US 1989-361194		19890605 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1987-77261, filed on 24 Jul 1987, now patented, Pat. No. US 4857654		

	NUMBER	DATE
PRIORITY INFORMATION:	CH 1986-3101	19860801 <--
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Hamilton, Cynthia	
LEGAL REPRESENTATIVE:	Hall, Luther A. R.	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
LINE COUNT:	769	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Titanocenes with, for example, π -cyclopentadienyl ligands in which one or two carbo- or heterocyclic aromatic rings are bonded to the titanium, the aromatic rings being substituted by fluorine in at least one of the two ortho-positions relative to the metal-carbon bond and being substituted by at least one free or etherified or esterified polyoxaalkylene radical, are suitable as photoinitiators for the photopolymerization of ethylenically unsaturated substrates.

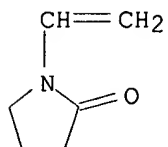
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 88-12-0, N-Vinylpyrrolidone, reactions 548-62-9,

Crystal violet 15625-89-5 25213-61-0.
 26570-48-9, Polyethylene glycol diacrylate 42978-66-5,
 Tripropylene glycol diacrylate
 (photopolymer. of, titanocenes as catalyst for)

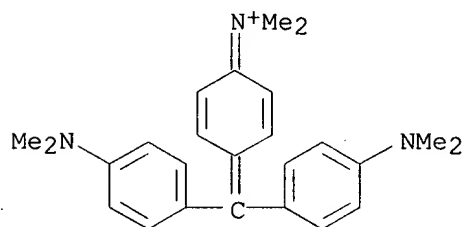
RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



RN 548-62-9 USPATFULL

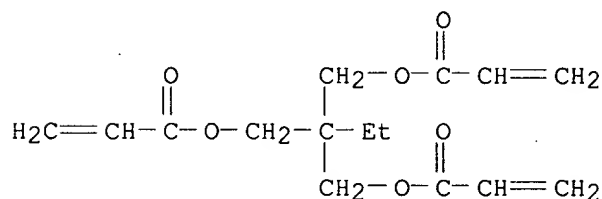
CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 15625-89-5 USPATFULL

CN 2-Propenoic acid, 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 25213-61-0 USPATFULL

CN 2-Butenedioic acid (2Z)-, monomethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

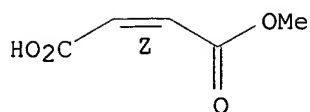
CM 1

CRN 3052-50-4

CMF C5 H6 O4

CDES 2:Z

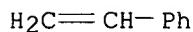
Double bond geometry as shown.



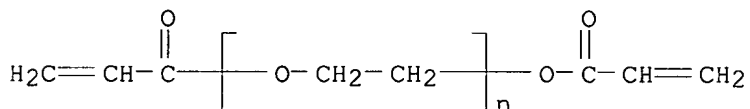
CM 2

CRN 100-42-5

CMF C8 H8

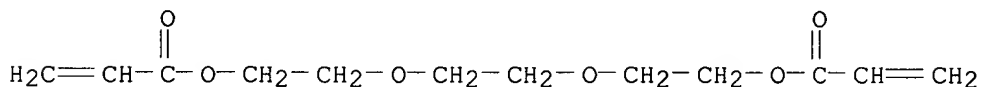


RN 26570-48-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)

RN 42978-66-5 USPATFULL

CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester (9CI) (CA INDEX NAME)



3 (D1-Me)

IT 83855-36-1

(photopolymn. of, titanocenes as catalysts for)

RN 83855-36-1 USPATFULL

CN Actilane AJ 20 (9CI) (CA INDEX NAME)

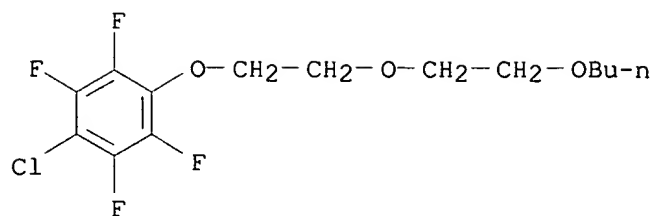
STRUCTURE DIAGRAM IS NOT AVAILABLE

IT 114458-39-8P

(preparation and metalation of)

RN 114458-39-8 USPATFULL

CN Benzene, 1-[2-(2-butoxyethoxy)ethoxy]-4-chloro-2,3,5,6-tetrafluoro- (9CI)
(CA INDEX NAME)



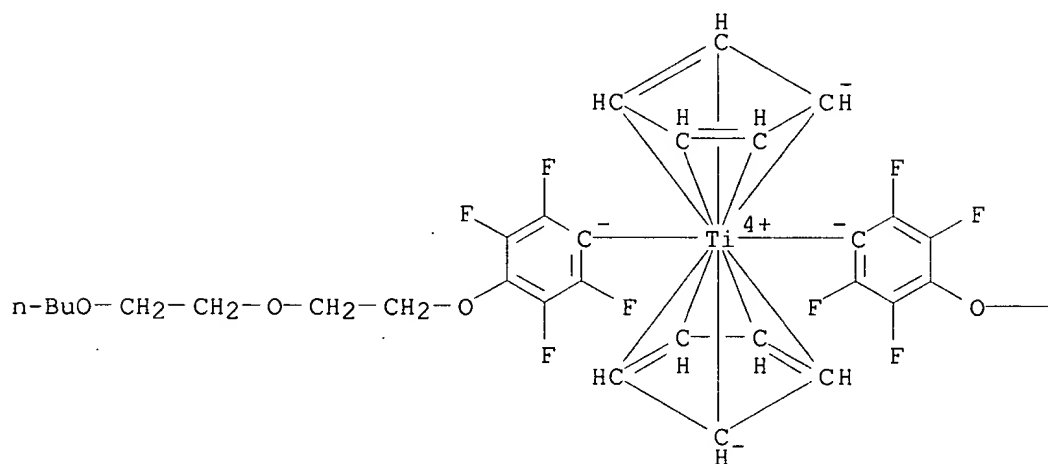
IT 114348-18-4P 114348-19-5P 114348-20-8P

(preparation of, as photopolymn. catalyst)

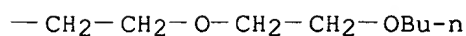
RN 114348-18-4 USPATFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis(η⁵-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

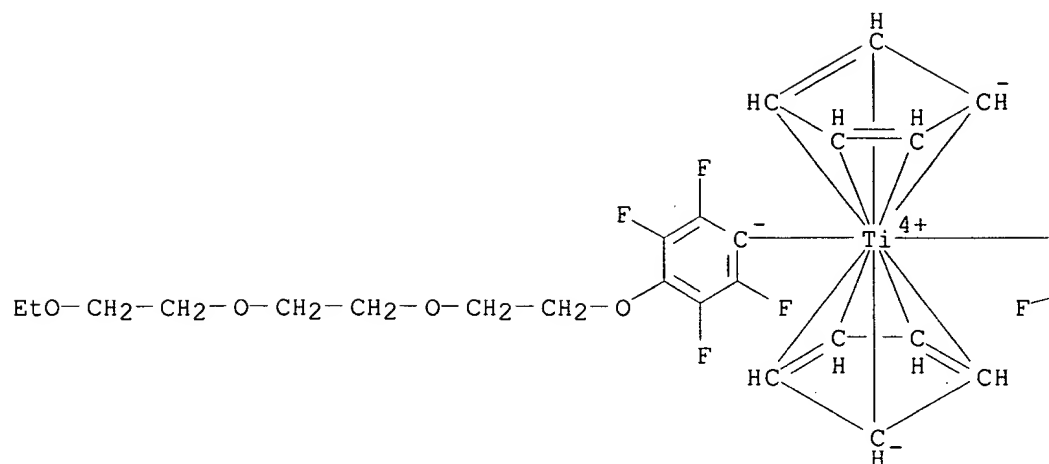


RN 114348-19-5 USPATFULL

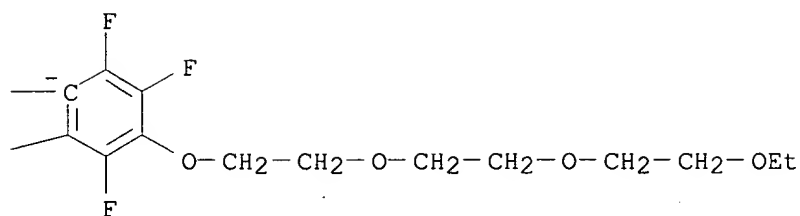
CN Titanium, bis(η⁵-2,4-cyclopentadien-1-yl)bis[4-[2-[2-(2-ethoxyethoxy)ethoxy]ethoxy]-2,3,5,6-tetrafluorophenyl]- (9CI) (CA INDEX NAME)

NAME)

PAGE 1-A



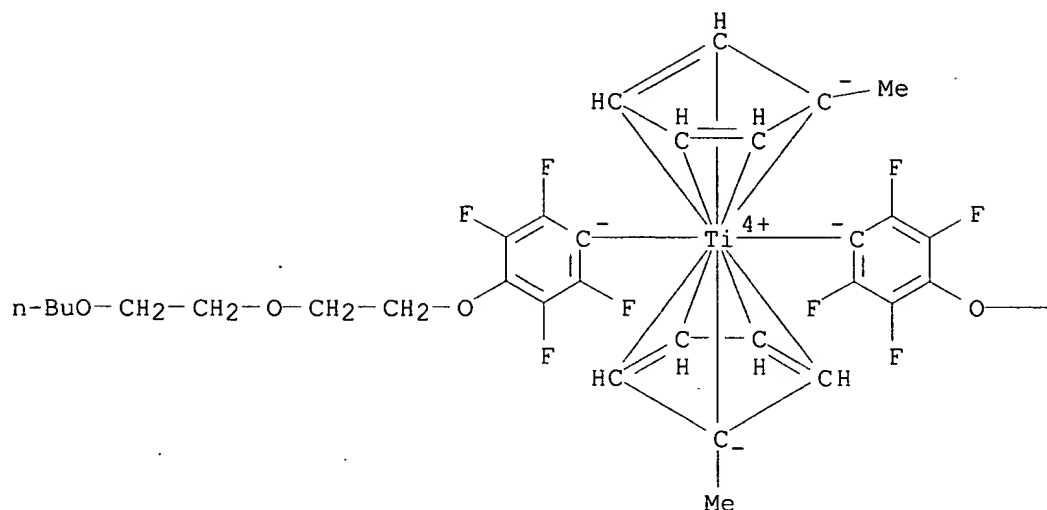
PAGE 1-B



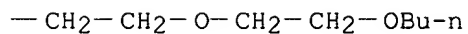
RN 114348-20-8 USPATFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis[(1,2,3,4,5-η)-1-methyl-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

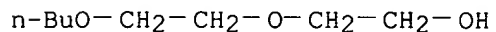


IT 112-34-5

(reaction of, with chloropentafluorobenzene)

RN 112-34-5 USPATFULL

CN Ethanol, 2-(2-butoxyethoxy)- (8CI, 9CI) (CA INDEX NAME)

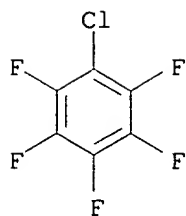


IT 344-07-0, Chloropentafluorobenzene

(reaction of, with diethylene glycol monobutyl ether)

RN 344-07-0 USPATFULL

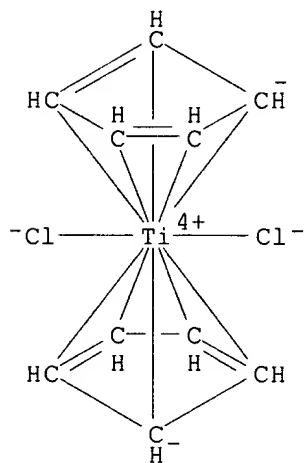
CN Benzene, chloropentafluoro- (6CI, 8CI, 9CI) (CA INDEX NAME)



IT 1271-19-8, Bis(cyclopentadienyl)titanium dichloride
(reaction of, with glycol ethers)

RN 1271-19-8 USPATFULL

CN Titanium, dichlorobis(η 5-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)



L49 ANSWER 6 OF 11 USPATFULL on STN

ACCESSION NUMBER: 90:79800 USPATFULL

TITLE: Titanocenes and their use

INVENTOR(S): Klingert, Bernd, Inzlingen, Germany, Federal Republic of

Sitek, Franciszek, Therwil, Switzerland

Rembold, Manfred, Aesch, Switzerland

PATENT ASSIGNEE(S): Ciba-Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4963470		19901016	<--
APPLICATION INFO.:	US 1990-469736		19900119	(7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1987-77280, filed on 24 Jul 1987, now abandoned			

	NUMBER	DATE	
PRIORITY INFORMATION:	CH 1986-3100	19860801	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

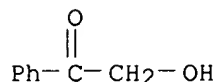
PRIMARY EXAMINER: McCamish, Marion C.
 ASSISTANT EXAMINER: Hamilton, Cynthia
 LEGAL REPRESENTATIVE: Hall, Luther A. R.
 NUMBER OF CLAIMS: 23
 EXEMPLARY CLAIM: 1,17,23
 LINE COUNT: 1074

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

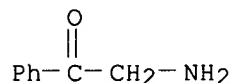
AB Titanocenes with silylated π -cyclopentadienyl ligands in which one or two carbo- or heterocyclic aromatic rings are bonded to the titanium, the aromatic rings being substituted by fluorine, --CF.sub.3, --C.sub.2 F.sub.5, --CF.sub.2 Cl or --CF.sub.2 CH.sub.3 in at least one of the two ortho-positions relative to the metal-carbon bonds, are suitable as photoinitiators for the photopolymerization of ethylenically unsaturated substrates. They are distinguished by a high sensitivity, stability to air and the action of heat, and a high activity in the region of UV light to visible light. They are furthermore readily soluble in the photopolymerizable compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

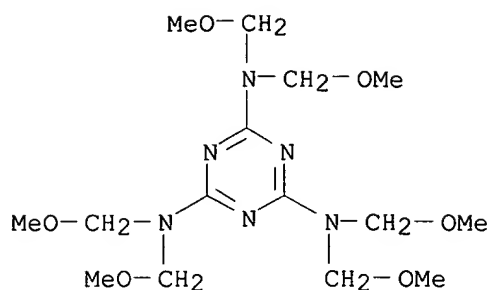
IT 582-24-1, α -Hydroxyacetophenone 613-89-8,
 α -Aminoacetophenone 3089-11-0, Hexamethoxymethylmelamine
 3524-68-3 9003-39-8, Poly(vinylpyrrolidone)
 15625-89-5 25135-39-1, Carboset 525 26570-48-9
 , Polyethylene glycol diacrylate 42978-66-5, Tripropylene
 glycol diacrylate 50935-03-0, BYK 300 58206-31-8,
 Scripset 540 60506-81-2, Dipentaerythritol pentaacrylate
 83855-36-1, Actilane AJ 20 115708-94-6
 (photopolymerizable photoimaging compns. containing silylated titanocene
 photoinitiator and)
 RN 582-24-1 USPATFULL
 CN Ethanone, 2-hydroxy-1-phenyl- (9CI) (CA INDEX NAME)



RN 613-89-8 USPATFULL
 CN Ethanone, 2-amino-1-phenyl- (9CI) (CA INDEX NAME)

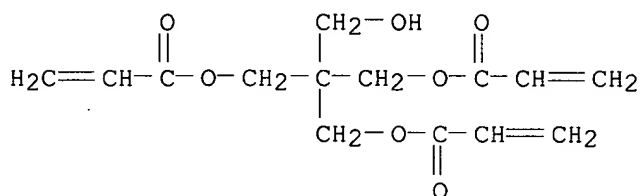


RN 3089-11-0 USPATFULL
 CN 1,3,5-Triazine-2,4,6-triamine, N,N,N',N',N'',N''-hexakis(methoxymethyl)-
 (9CI) (CA INDEX NAME)



RN 3524-68-3 USPATFULL

CN 2-Propenoic acid, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



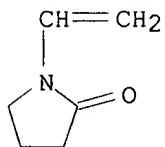
RN 9003-39-8 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

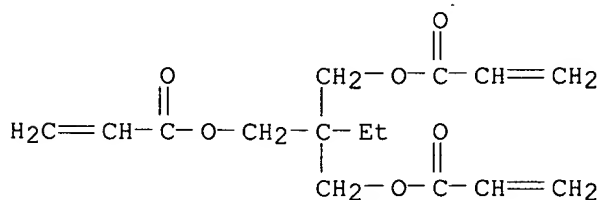
CRN 88-12-0

CMF C6 H9 N O



RN 15625-89-5 USPATFULL

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



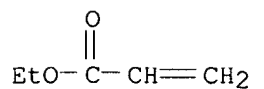
RN 25135-39-1 USPATFULL

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

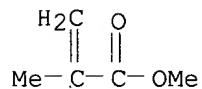
CMF C5 H8 O2



CM 2

CRN 80-62-6

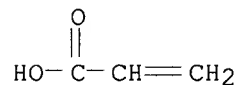
CMF C5 H8 O2



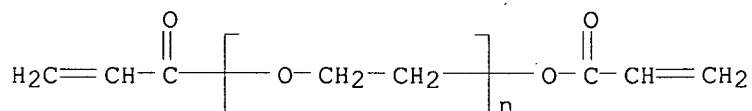
CM 3

CRN 79-10-7

CMF C3 H4 O2

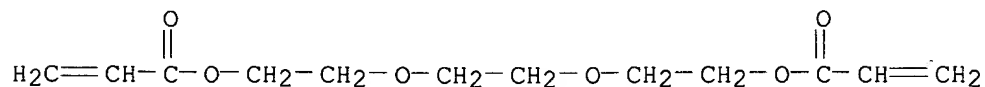


RN 26570-48-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)

RN 42978-66-5 USPATFULL

CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester (9CI) (CA INDEX NAME)



3 (D1-Me)

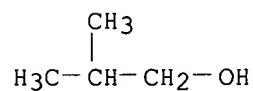
RN 50935-03-0 USPATFULL
 CN Byk 300 (9CI) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

RN 58206-31-8 USPATFULL
 CN 2,5-Furandione, polymer with ethenylbenzene, 2-methylpropyl ester (9CI)
 (CA INDEX NAME)

CM 1

CRN 78-83-1
 CMF C4 H10 O

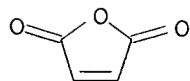


CM 2

CRN 9011-13-6
 CMF (C8 H8 . C4 H2 O3)x
 CCI PMS

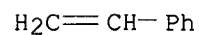
CM 3

CRN 108-31-6
 CMF C4 H2 O3

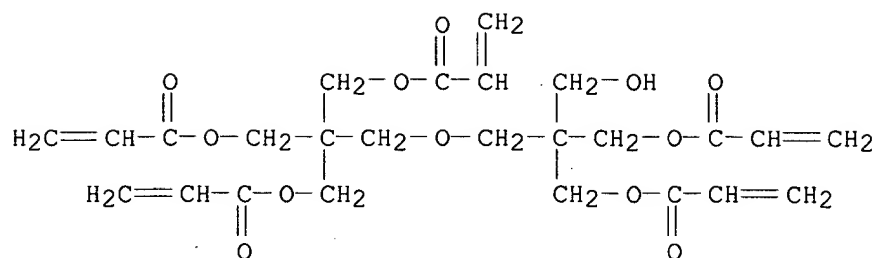


CM 4

CRN 100-42-5
 CMF C8 H8



RN 60506-81-2 USPATFULL
 CN 2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

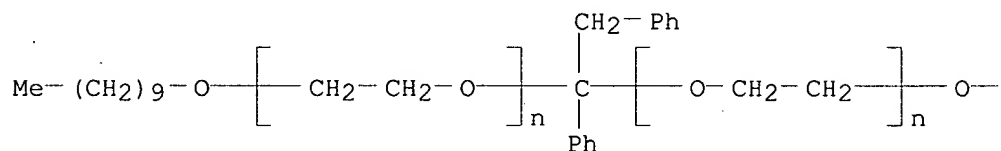


STRUCTURE DIAGRAM IS NOT AVAILABLE

RN 115708-94-6 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α,α' -(1,2-diphenylethylidene)bis[ω -(decyloxy)- (9CI) (CA INDEX NAME)]

PAGE 1-A



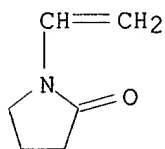
PAGE 1-B

$$-(\text{CH}_2)_9-\text{Me}$$

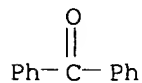
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IT  88-12-0, properties 119-61-9, Benzophenone, properties
      (photopolymerizable photoimaging compns. containing silylated titanocene
      photoinitiator and)
RN  88-12-0  USPATFULL
CN  2-Pyrrolidinone, 1-ethenyl- (9CI)  (CA INDEX NAME)

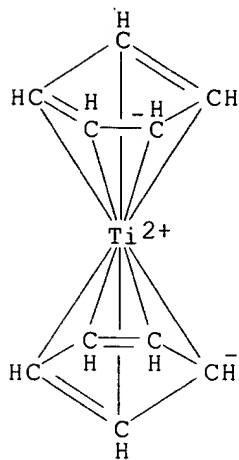
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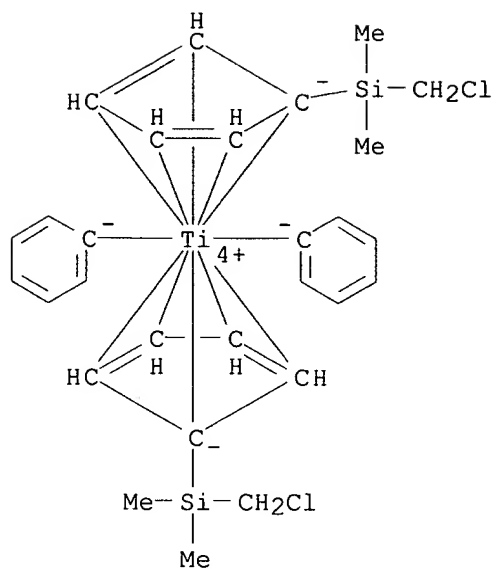
RN 119-61-9 USPATFULL
CN Methanone, diphenyl- (9CI) (CA INDEX NAME)



IT 1271-29-ODP, Titanocene, silylated derivs.
 (preparation and photopolymer photoimaging compns. containing, as
 photoinitiators)
 RN 1271-29-0 USPATFULL
 CN Titanocene (9CI) (CA INDEX NAME)

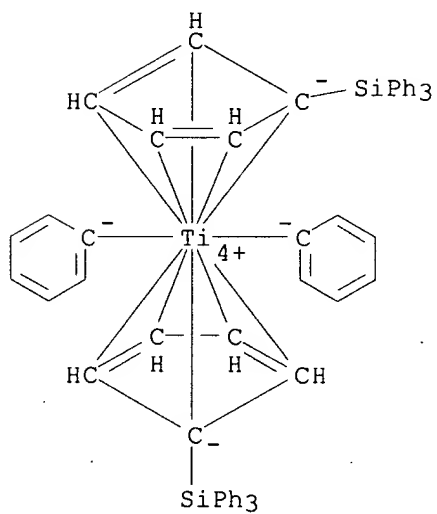


IT 115735-96-1P 115735-97-2P 115735-98-3P
 115735-99-4P 115736-00-0P 115736-01-1P
 115736-02-2P 115736-03-3P 115800-32-3P
 115800-33-4P 115800-34-5P 115800-35-6P
 115800-36-7P 115800-37-8P 115800-38-9P
 115800-39-0P 115831-48-6P 115901-02-5P
 115901-03-6P 115901-04-7P 115901-05-8P
 (preparation and photopolymerizable photoimaging compns. containing, as
 photoinitiator)
 RN 115735-96-1 USPATFULL
 CN Titanium, bis[(1,2,3,4,5-η)-1-[(chloromethyl)dimethylsilyl]-2,4-
 cyclopentadien-1-yl]diphenyl- (9CI) (CA INDEX NAME)



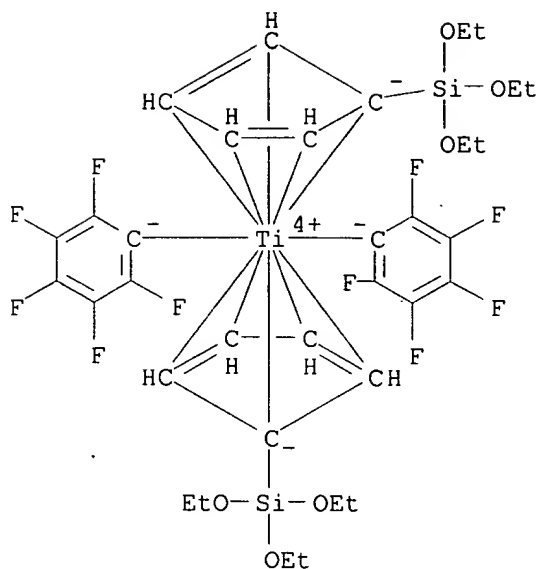
RN 115735-97-2 USPATFULL

CN Titanium, diphenylbis[(1,2,3,4,5-η)-1-(tri(phenyl)silyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



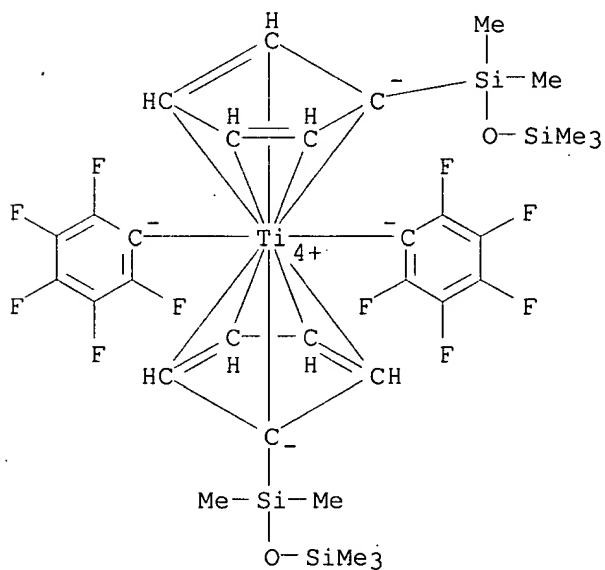
RN 115735-98-3 USPATFULL

CN Titanium, bis(pentafluorophenyl)bis[(1,2,3,4,5-η)-1-(triethoxysilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



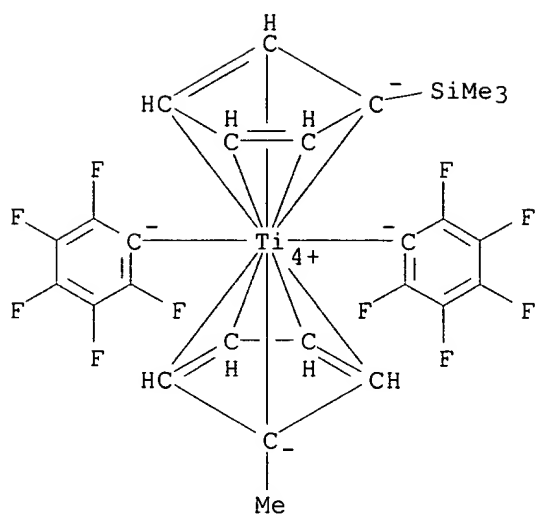
RN 115735-99-4 USPTAFULL

CN Titanium, bis(pentafluorophenyl)bis[(1,2,3,4,5-η)-1-(pentamethyldisiloxanyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



RN 115736-00-0 USPTAFULL

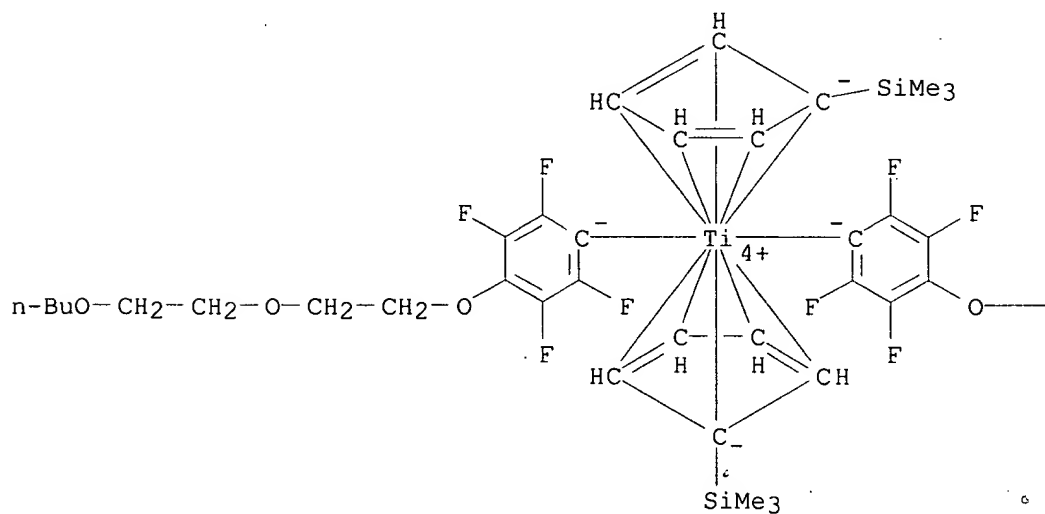
CN Titanium, [(1,2,3,4,5-η)-1-methyl-2,4-cyclopentadien-1-yl]bis(pentafluorophenyl)[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



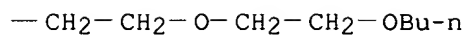
RN 115736-01-1 USPTAFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

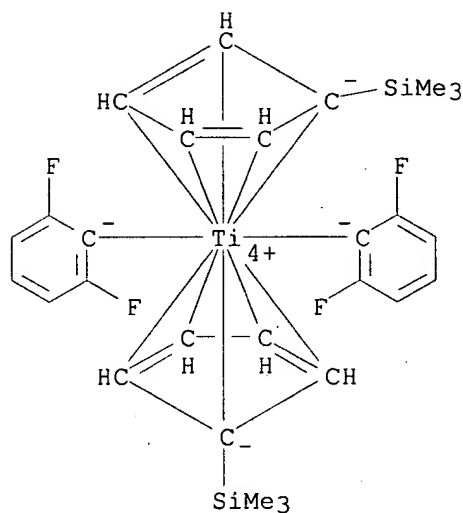


PAGE 1-B



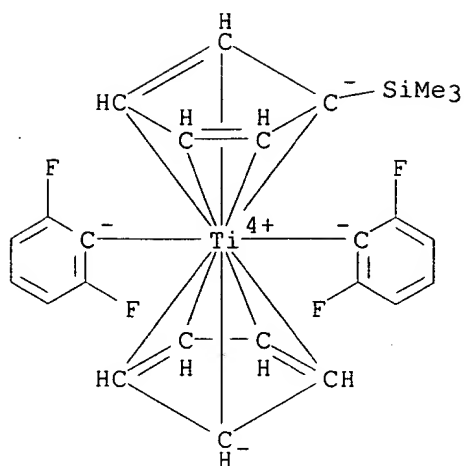
RN 115736-02-2 USPATFULL

CN Titanium, bis(2,6-difluorophenyl)bis[(1,2,3,4,5- η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



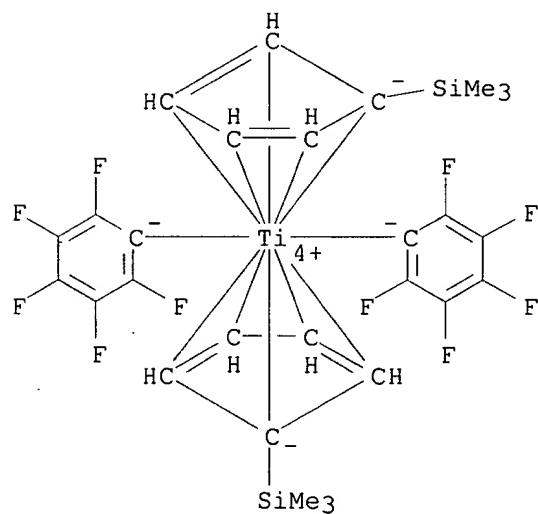
RN 115736-03-3 USPATFULL

CN Titanium, (η^5 -2,4-cyclopentadien-1-yl)bis(2,6-difluorophenyl)[(1,2,3,4,5- η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



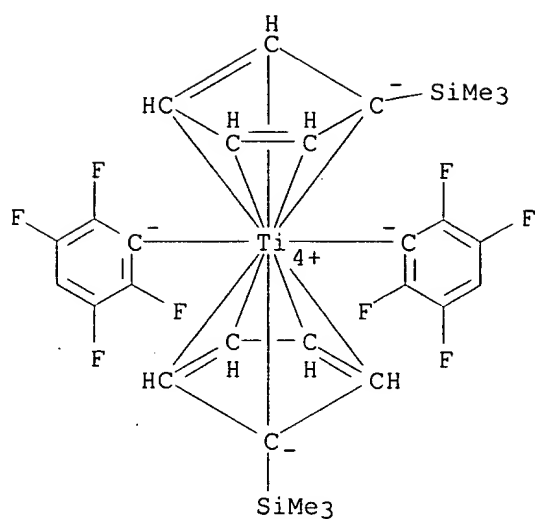
RN 115800-32-3 USPATFULL

CN Titanium, bis(pentafluorophenyl)bis[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



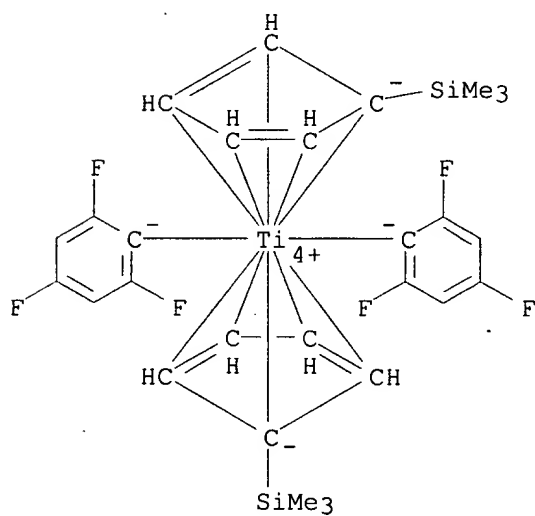
RN 115800-33-4 USPATFULL

CN Titanium, bis(2,3,5,6-tetrafluorophenyl)bis[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



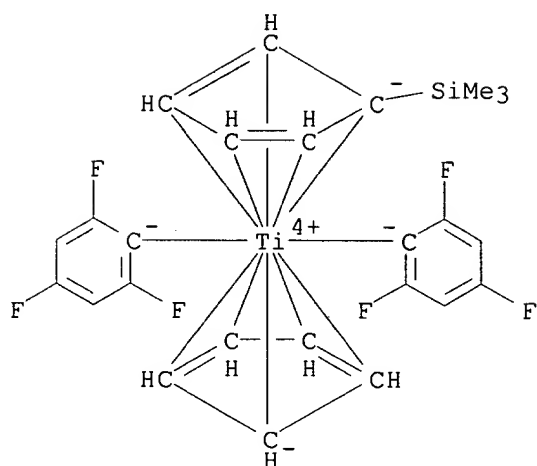
RN 115800-34-5 USPATFULL

CN Titanium, bis(2,4,6-trifluorophenyl)bis[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



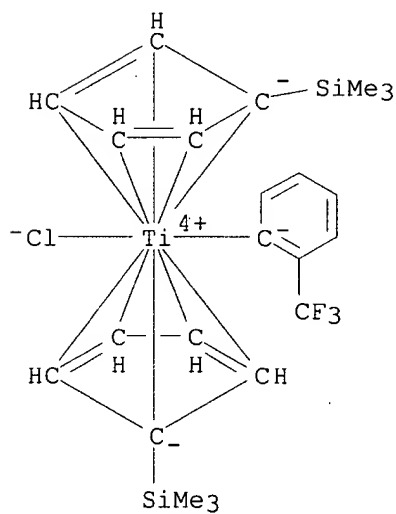
RN 115800-35-6 USPATFULL

CN Titanium, (η⁵-2,4-cyclopentadien-1-yl)bis(2,4,6-trifluorophenyl)[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



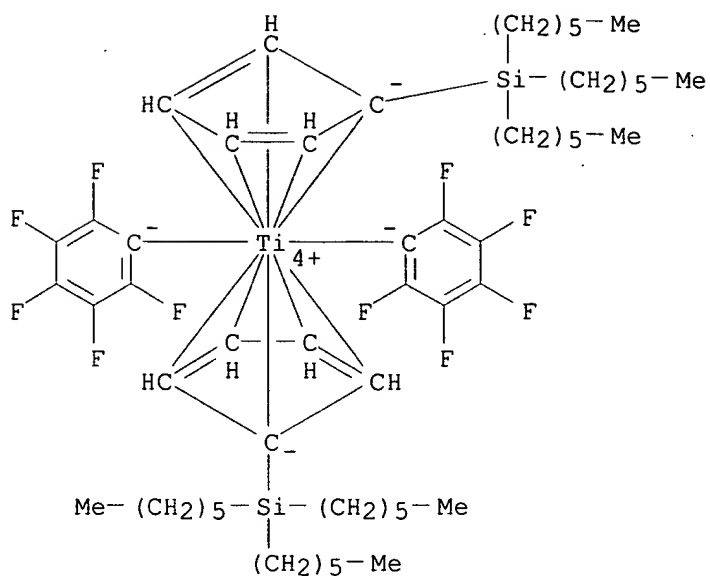
RN 115800-36-7 USPATFULL

CN Titanium, chloro[2-(trifluoromethyl)phenyl]bis[(1,2,3,4,5- η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



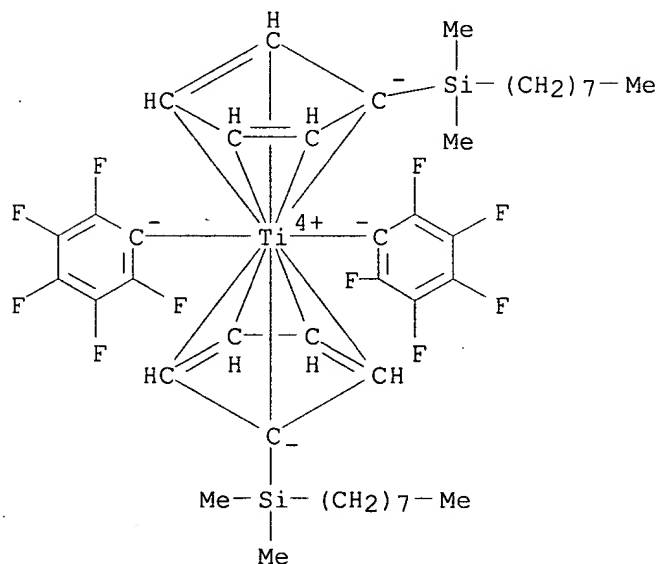
RN 115800-37-8 USPATFULL

CN Titanium, bis(pentafluorophenyl)bis[(1,2,3,4,5- η)-1-(triethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



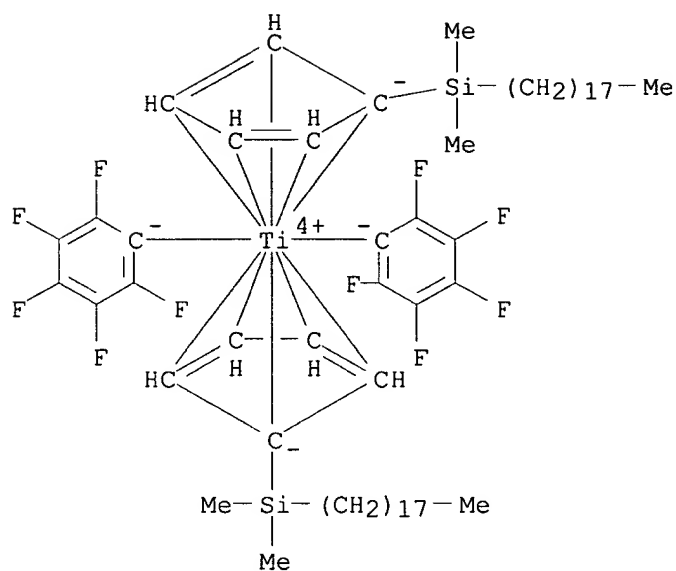
RN 115800-38-9 USPATFULL

CN Titanium, bis[(1,2,3,4,5-η)-1-(dimethyloctylsilyl)-2,4-cyclopentadien-1-yl]bis(pentafluorophenyl)- (9CI) (CA INDEX NAME)



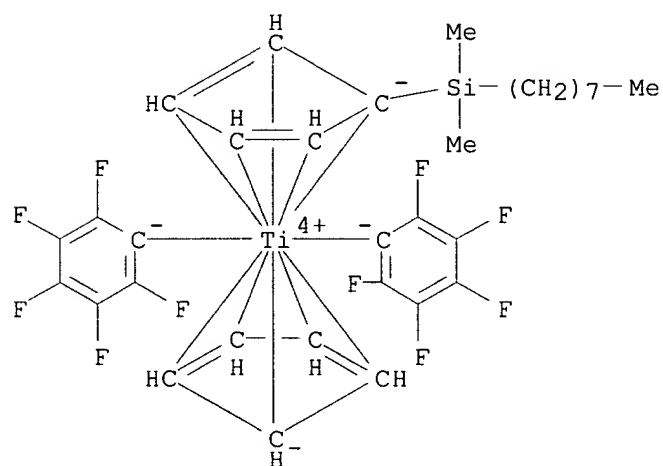
RN 115800-39-0 USPATFULL

CN Titanium, bis[(1,2,3,4,5-η)-1-(dimethyloctadecylsilyl)-2,4-cyclopentadien-1-yl]bis(pentafluorophenyl)- (9CI) (CA INDEX NAME)



RN 115831-48-6 USPATFULL

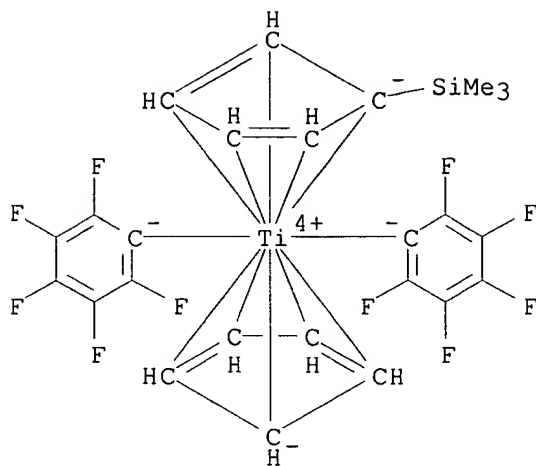
CN Titanium, (η⁵-2,4-cyclopentadien-1-yl)[(1,2,3,4,5-η)-1-(dimethyloctylsilyl)-2,4-cyclopentadien-1-yl]bis(pentafluorophenyl)-(9CI) (CA INDEX NAME)



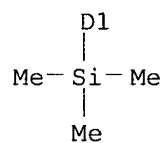
RN 115901-02-5 USPATFULL

CN Titanium, [(1,2,3,4,5-η)-1,?-bis(trimethylsilyl)-2,4-cyclopentadien-1-yl](η⁵-2,4-cyclopentadien-1-yl)bis(pentafluorophenyl)-(9CI) (CA INDEX NAME)

PAGE 1-A

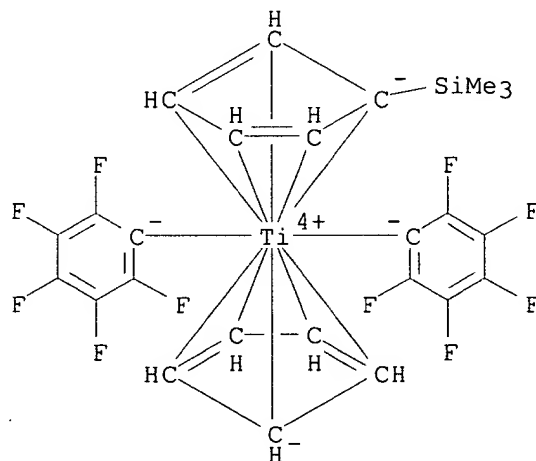


PAGE 2-A

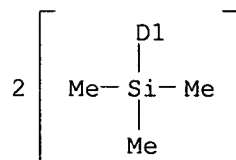


RN 115901-03-6 USPATFULL
 CN Titanium, (η^5 -2,4-cyclopentadien-1-yl)bis(pentafluorophenyl)[(1,2,3,4,5- η)-tris(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

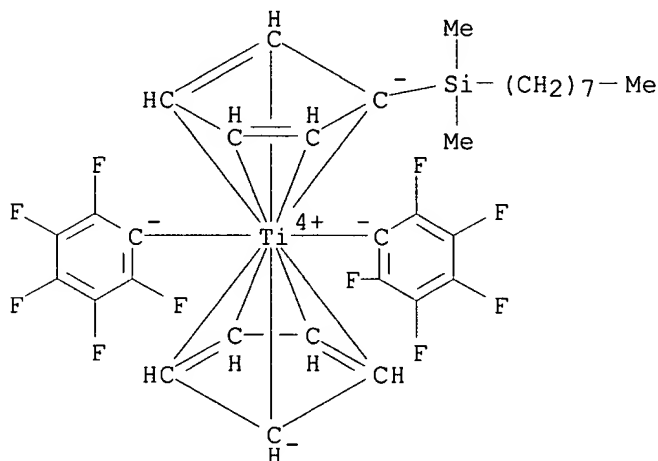


PAGE 2-A

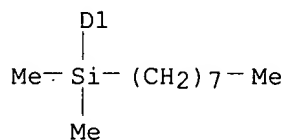


RN 115901-04-7 USPATFULL
 CN Titanium, [(1,2,3,4,5- η)-1,?-bis(dimethyloctylsilyl)-2,4-cyclopentadien-1-yl](η 5-2,4-cyclopentadien-1-yl)bis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

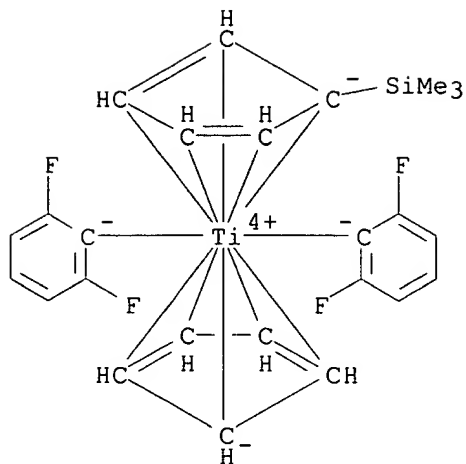


PAGE 2-A

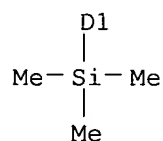


RN 115901-05-8 USPATFULL
 CN Titanium, [(1,2,3,4,5- η)-1,?-bis(trimethylsilyl)-2,4-cyclopentadien-1-yl](η 5-2,4-cyclopentadien-1-yl)bis(2,6-difluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

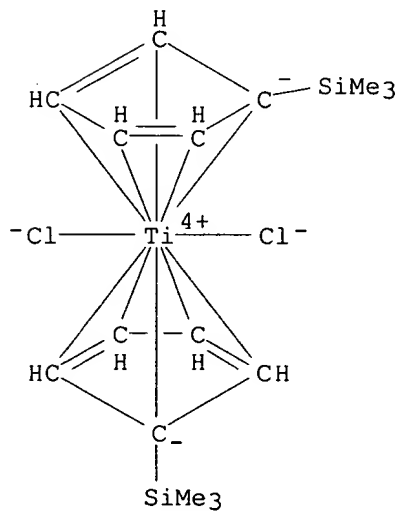


IT 59307-41-4 79269-70-8 115901-06-9

(reaction of, with fluorinated benzenes)

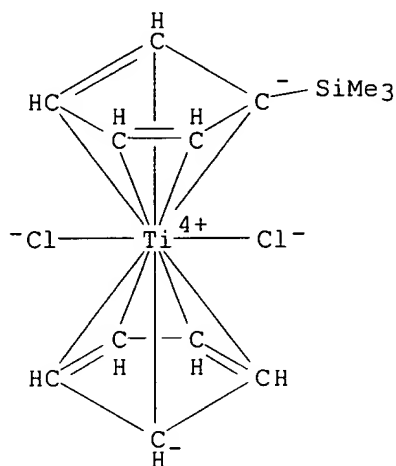
RN 59307-41-4 USPATFULL

CN Titanium, dichlorobis[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



RN 79269-70-8 USPATFULL

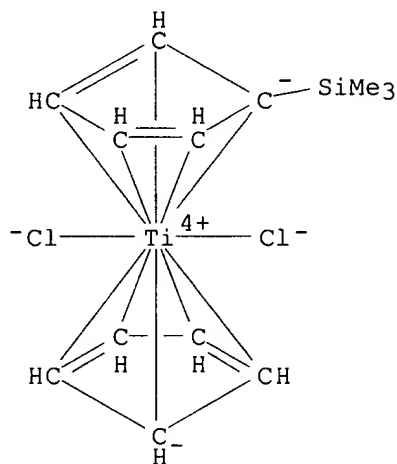
CN Titanium, dichloro(η5-2,4-cyclopentadien-1-yl)[(1,2,3,4,5-η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



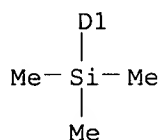
RN 115901-06-9 USPTFULL

CN Titanium, [(1,2,3,4,5-η)-1,?-bis(trimethylsilyl)-2,4-cyclopentadien-1-yl]dichloro(η⁵-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

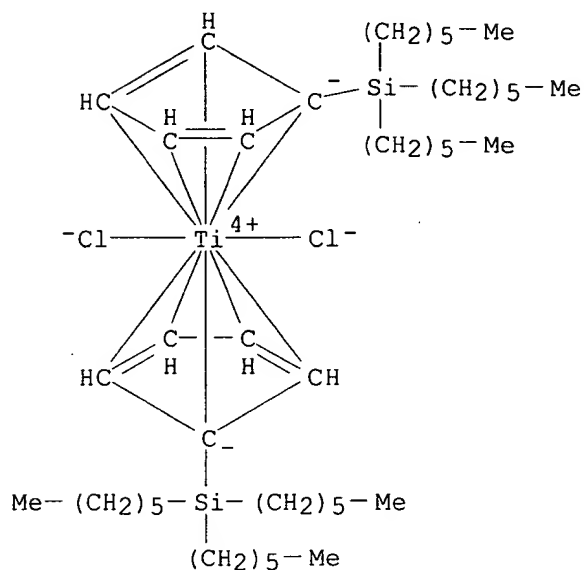


PAGE 2-A

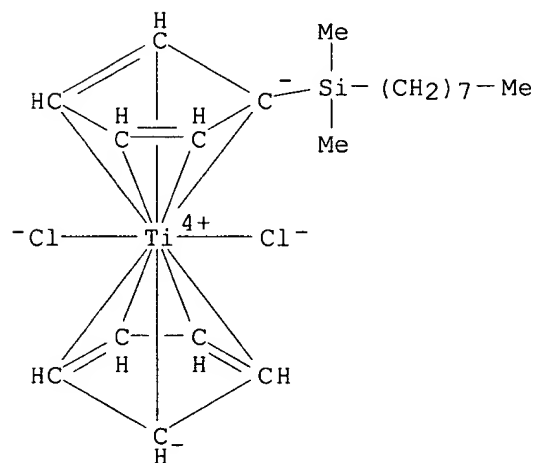


IT 115736-04-4 115736-05-5 115736-06-6
 115736-07-7 115736-08-8 115736-09-9
 115736-10-2 115736-11-3 115736-12-4
 115736-13-5 115901-07-0 115901-08-1
 (reaction of, with pentafluorobenzene)

RN 115736-04-4 USPATFULL

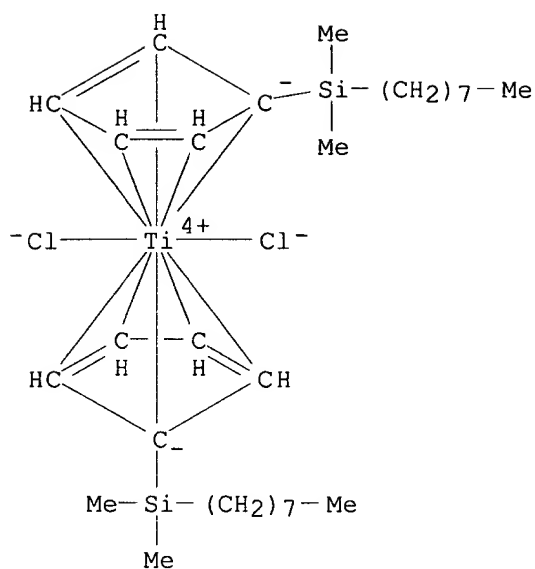
CN Titanium, dichlorobis[(1,2,3,4,5- η)-1-(trihexylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

RN 115736-05-5 USPATFULL

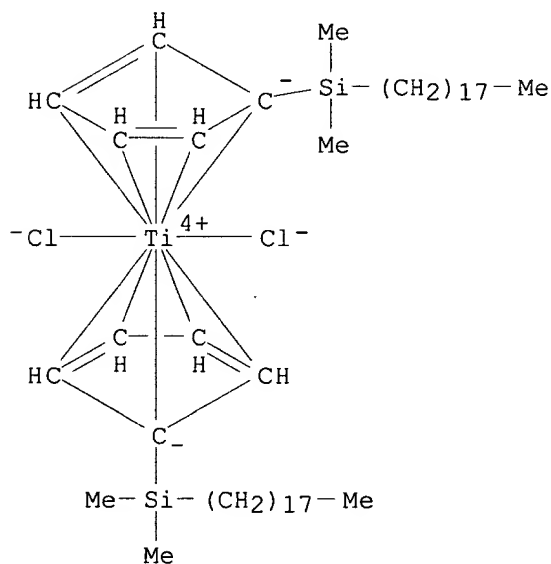
CN Titanium, dichloro(η 5-2,4-cyclopentadien-1-yl)[(1,2,3,4,5- η)-1-(dimethyloctylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

RN 115736-06-6 USPATFULL

CN Titanium, dichlorobis[(1,2,3,4,5- η)-1-(dimethyloctylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

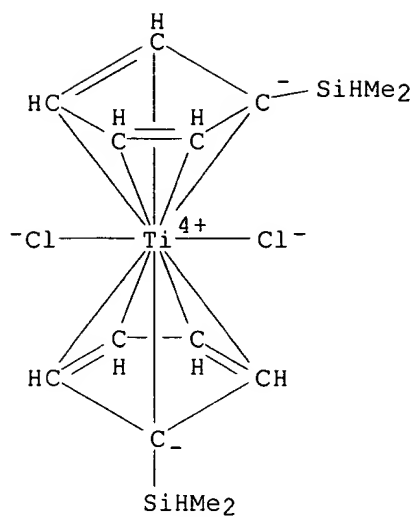


RN 115736-07-7 USPATFULL

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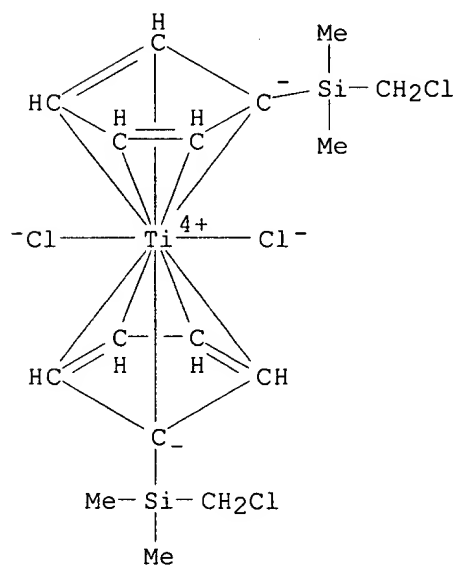
RN 115736-08-8 USPATFULL

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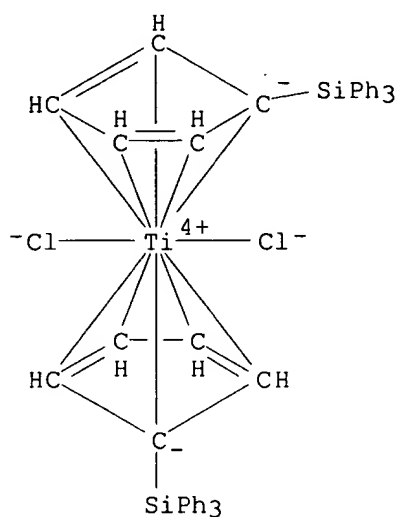
RN 115736-09-9 USPATFULL

CN Titanium, dichlorobis[(1,2,3,4,5- η)-1-[(chloromethyl)dimethylsilyl]-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



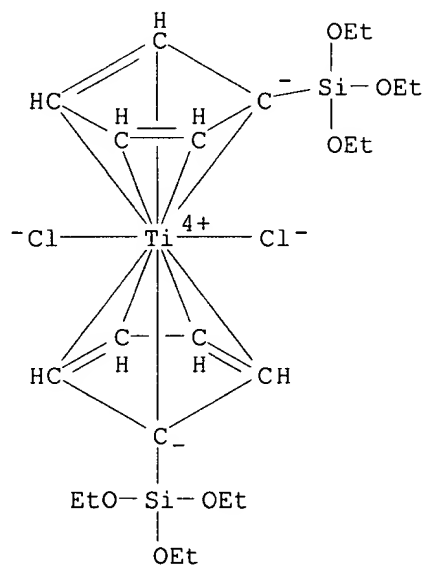
RN 115736-10-2 USPATFULL

CN Titanium, dichlorobis[(1,2,3,4,5- η)-1-(triphenylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



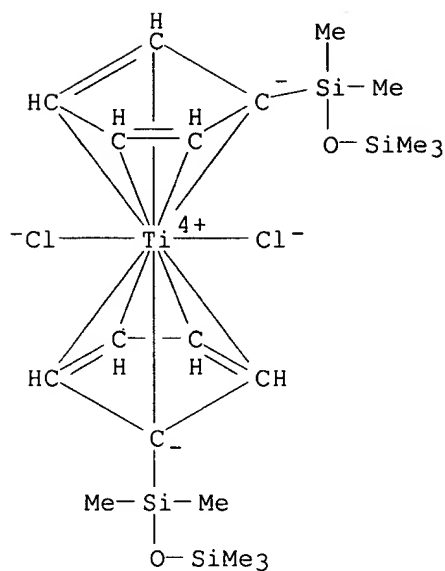
RN 115736-11-3 USPATFULL

CN Titanium, dichlorobis[(1,2,3,4,5- η)-1-(triethoxysilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



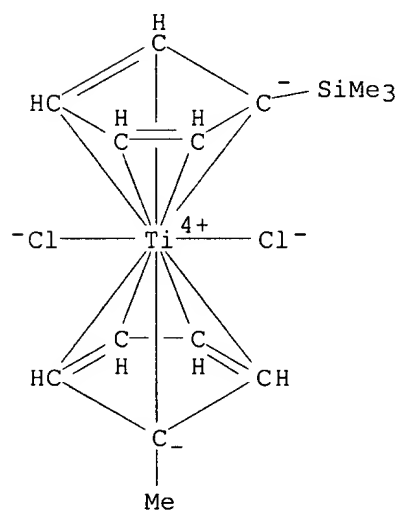
RN 115736-12-4 USPATFULL

CN Titanium, dichlorobis[(1,2,3,4,5- η)-1-(pentamethyldisiloxanyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)



RN 115736-13-5 USPATFULL

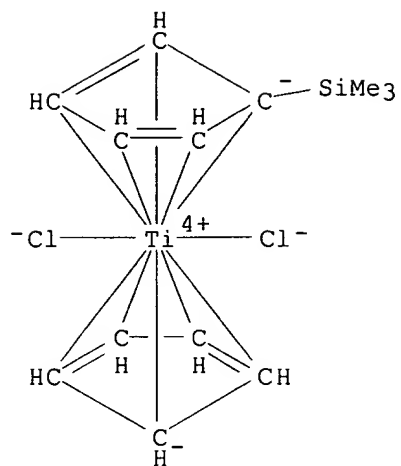
CN Titanium, dichloro[(1,2,3,4,5- η)-1-methyl-2,4-cyclopentadien-1-yl][(1,2,3,4,5- η)-1-(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI)
(CA INDEX NAME)



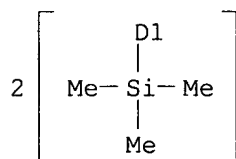
RN 115901-07-0 USPATFULL

CN Titanium, dichloro(η^5 -2,4-cyclopentadien-1-yl)[(1,2,3,4,5- η)-tris(trimethylsilyl)-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



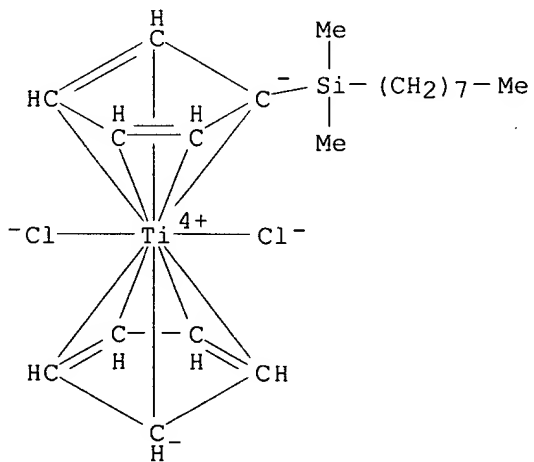
PAGE 2-A



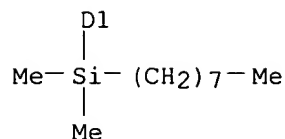
RN 115901-08-1 USPATFULL

CN Titanium, [(1,2,3,4,5- η)-1,?-bis(dimethyloctylsilyl)-2,4-cyclopentadien-1-yl]dichloro(η 5-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)

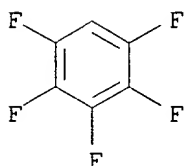
PAGE 1-A



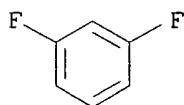
PAGE 2-A



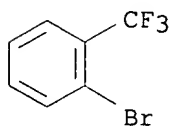
IT 363-72-4, Pentafluorobenzene 372-18-9,
m-Difluorobenzene 392-83-6 1559-88-2
2367-76-2 114458-39-8
(reaction of, with silylated titanocene derivs.)
RN 363-72-4 USPATFULL
CN Benzene, pentafluoro- (6CI, 8CI, 9CI) (CA INDEX NAME)



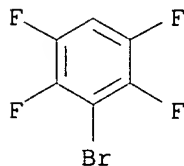
RN 372-18-9 USPATFULL
CN Benzene, 1,3-difluoro- (9CI) (CA INDEX NAME)



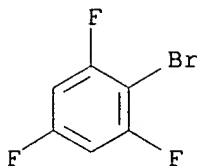
RN 392-83-6 USPATFULL
CN Benzene, 1-bromo-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



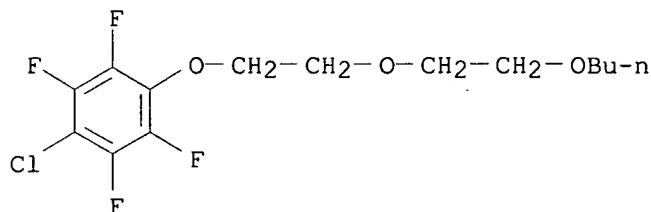
RN 1559-88-2 USPATFULL
CN Benzene, 3-bromo-1,2,4,5-tetrafluoro- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 2367-76-2 USPATFULL
CN Benzene, 2-bromo-1,3,5-trifluoro- (8CI, 9CI) (CA INDEX NAME)



RN 114458-39-8 USPATFULL
 CN Benzene, 1-[2-(2-butoxyethoxy)ethoxy]-4-chloro-2,3,5,6-tetrafluoro- (9CI)
 (CA INDEX NAME)



L49 ANSWER 7 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 90:19500 USPATFULL
 TITLE: Coating compositions
 INVENTOR(S): Head, Robert A., Upton, England
 Johnson, Steven, Runcorn, England
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, Millbank, England
 (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4908297		19900313	<--
APPLICATION INFO.:	US 1987-94699		19870909	(7)

	NUMBER	DATE	
PRIORITY INFORMATION:	GB 1986-21793	19860910	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Michl, Paul R.		
ASSISTANT EXAMINER:	Chea, Thorl		
LEGAL REPRESENTATIVE:	Cushman, Darby & Cushman		
NUMBER OF CLAIMS:	15		
EXEMPLARY CLAIM:	1		
LINE COUNT:	551		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Coating Compositions Photocurable coating compositions useful for coating optical glass fibres comprising:

(a) a polyethylenically unsaturated polyurethane derived from a polyol having pendent fluoroalkyl groups;

(b) an ethylenically unsaturated monomer which is a liquid solvent for the polyethylenically unsaturated polyurethane and is copolymerizable therewith, and

(c) a photo-initiator composition.

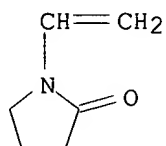
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **88-12-0D**, N-Vinylpyrrolidone, reaction products with fluorinated urethanes **140-88-5D**, ethoxylated, reaction products with fluorinated urethanes **937-41-7D**, Phenyl acrylate, alkoxyated, reaction products with fluorinated urethanes **4098-71-9D**, reaction products with fluorinated diols, polymers with polypropylene glycol **15625-89-5D**, ethoxylated, reaction products with fluorinated urethanes **114664-52-7D**, reaction products with ethylenic compds. **114664-53-8D**, reaction products with ethylenic compds.

(coating compns., for optical fibers)

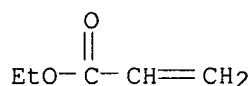
RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



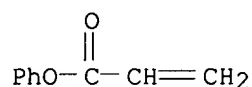
RN 140-88-5 USPATFULL

CN 2-Propenoic acid, ethyl ester (9CI) (CA INDEX NAME)



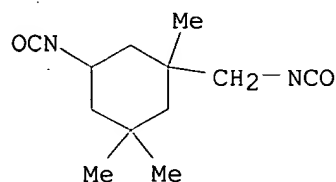
RN 937-41-7 USPATFULL

CN 2-Propenoic acid, phenyl ester (9CI) (CA INDEX NAME)



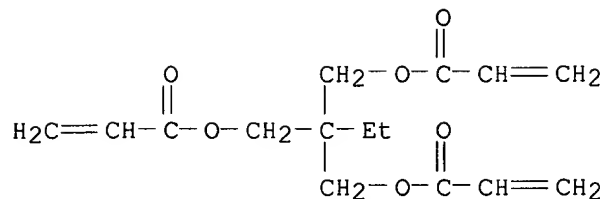
RN 4098-71-9 USPATFULL

CN Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



RN 15625-89-5 USPATFULL

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 114664-52-7 USPATFULL

CN Phenol, 3,5-bis(1,1-dimethylethyl)-, polymer with α -hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

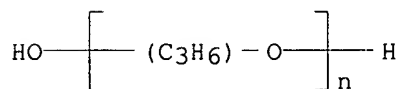
CM 1

CRN 25322-69-4

CMF (C3 H6 O)_n H2 O

CCI IDS, PMS

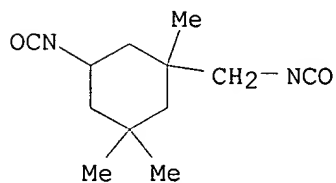
CDES 8:ID



CM 2

CRN 4098-71-9

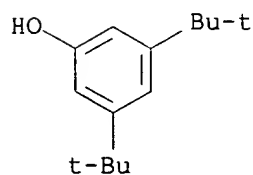
CMF C12 H18 N2 O2



CM 3

CRN 1138-52-9

CMF C14 H22 O



RN 114664-53-8 USPATFULL

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with 3,5-bis(1,1-dimethylethyl)phenol, α -hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)] and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

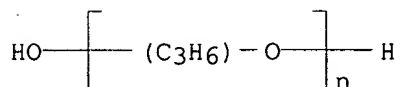
CM 1

CRN 25322-69-4

CMF (C3 H6 O)_n H2 O

CCI IDS, PMS

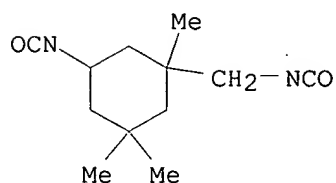
CDES 8:ID



CM 2

CRN 4098-71-9

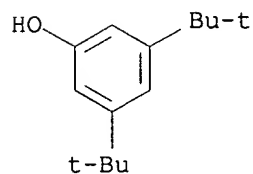
CMF C12 H18 N2 O2



CM 3

CRN 1138-52-9

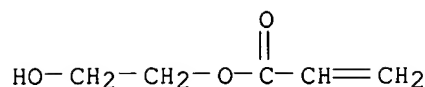
CMF C14 H22 O



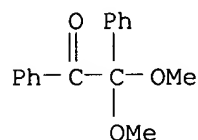
CM 4

CRN 818-61-1

CMF C5 H8 O3



IT 24650-42-8, Irgacure 651
 (photoinitiator, in fluorinated polyurethane coating compns. for
 optical fibers)
 RN 24650-42-8 USPATFULL
 CN Ethanone, 2,2-dimethoxy-1,2-diphenyl- (9CI) (CA INDEX NAME)



L49 ANSWER 8 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 89:67600 USPATFULL
 TITLE: Titanocenes and their use
 INVENTOR(S): Riediker, Martin, Riehen, Switzerland
 Steiner, Eginhard, Fullinsdorf, Switzerland
 Beyeler, Harry, Basel, Switzerland
 Rembold, Manfred, Aesch, Switzerland
 Sitek, Franciszek, Therwil, Switzerland
 PATENT ASSIGNEE(S): Ciba-Geigy Corporation, Ardsley, NY, United States
 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4857654		19890815	<--
APPLICATION INFO.:	US 1987-77261		19870724	(7)

	NUMBER	DATE	
PRIORITY INFORMATION:	CH 1986-3101	19860801	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Shippen, Michael L.		
LEGAL REPRESENTATIVE:	Hall, Luther A. R.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
LINE COUNT:	787		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Titanocenes with, for example, π -cyclopentadienyl ligands in which one or two carbo- or heterocyclic aromatic rings are bonded to the titanium, the aromatic rings being substituted by fluorine in at least one of the two ortho-positions relative to the metal-carbon bond and being substituted by at least one free or etherified or esterified polyoxaalkylene radical, are suitable as photoinitiators for the photopolymerization of ethylenically unsaturated substrates.

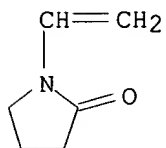
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 88-12-0, N-Vinylpyrrolidone, reactions 548-62-9,
 Crystal violet 15625-89-5 25213-61-0
 26570-48-9, Polyethylene glycol diacrylate 42978-66-5,

Tripropylene glycol diacrylate
(photopolymer. of, titanocenes as catalyst for)

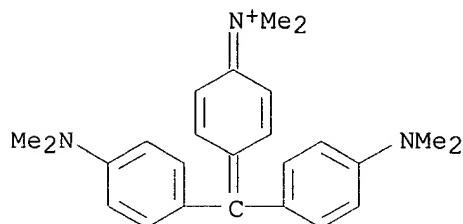
RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



RN 548-62-9 USPATFULL

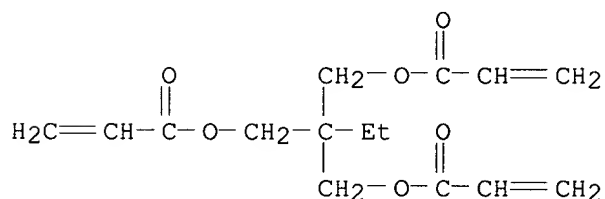
CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 15625-89-5 USPATFULL

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 25213-61-0 USPATFULL

CN 2-Butenedioic acid (2Z)-, monomethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

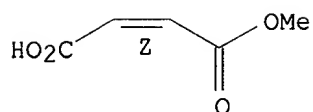
CM 1

CRN 3052-50-4

CMF C5 H6 O4

CDES 2:Z

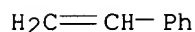
Double bond geometry as shown.



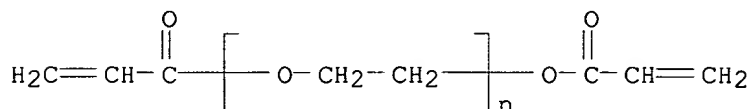
CM 2

CRN 100-42-5

CMF C8 H8

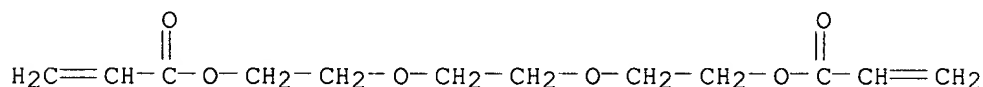


RN 26570-48-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]- (9CI) (CA INDEX NAME)

RN 42978-66-5 USPATFULL

CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester (9CI) (CA INDEX NAME)



3 (D1-Me)

IT 83855-36-1

(photopolymer. of, titanocenes as catalysts for)

RN 83855-36-1 USPATFULL

CN Actilane AJ 20 (9CI) (CA INDEX NAME)

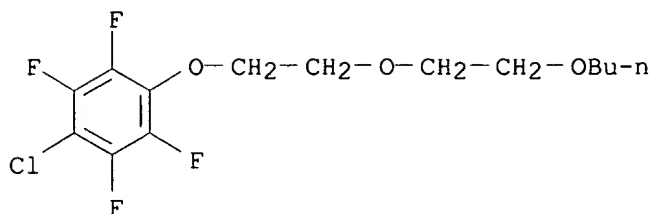
STRUCTURE DIAGRAM IS NOT AVAILABLE

IT 114458-39-8P

(preparation and metalation of)

RN 114458-39-8 USPATFULL

CN Benzene, 1-[2-(2-butoxyethoxy)ethoxy]-4-chloro-2,3,5,6-tetrafluoro- (9CI)
(CA INDEX NAME)



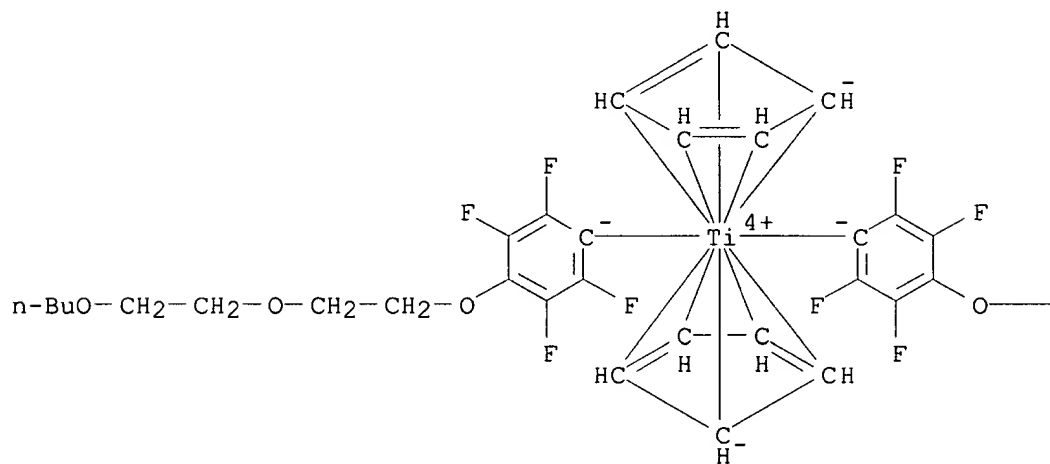
IT 114348-18-4P 114348-19-5P 114348-20-8P

(preparation of, as photopolymn. catalyst)

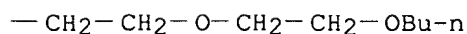
RN 114348-18-4 USPATFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis(η⁵-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

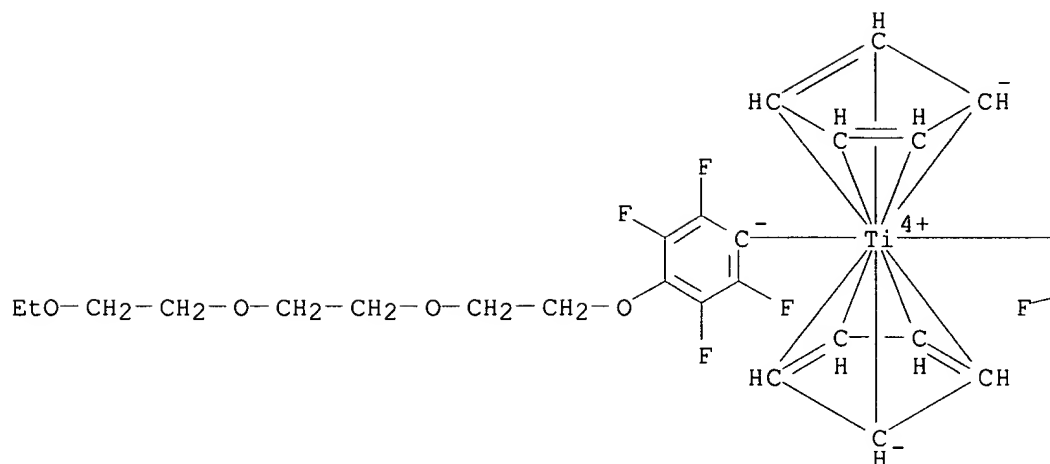


RN 114348-19-5 USPATFULL

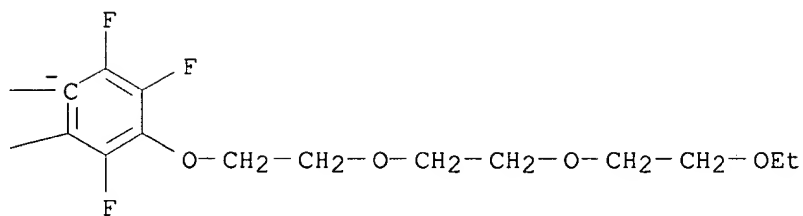
CN Titanium, bis(η⁵-2,4-cyclopentadien-1-yl)bis[4-[2-[2-(2-ethoxyethoxy)ethoxy]ethoxy]-2,3,5,6-tetrafluorophenyl]- (9CI) (CA INDEX NAME)

NAME)

PAGE 1-A



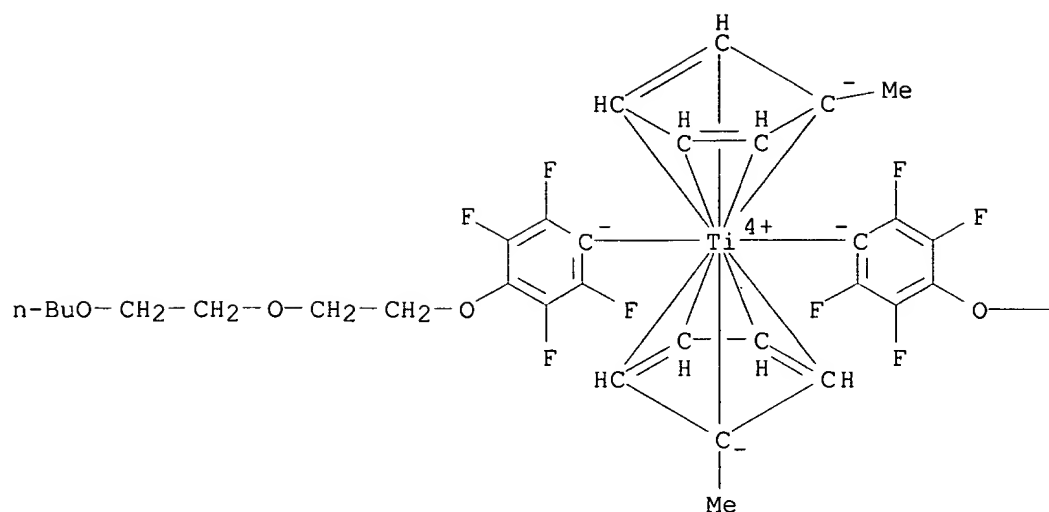
PAGE 1-B



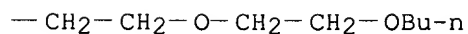
RN 114348-20-8 USPATFULL

CN Titanium, bis[4-[2-(2-butoxyethoxy)ethoxy]-2,3,5,6-tetrafluorophenyl]bis[(1,2,3,4,5-η)-1-methyl-2,4-cyclopentadien-1-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

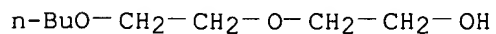


IT 112-34-5

(reaction of, with chloropentafluorobenzene)

RN 112-34-5 USPATFULL

CN Ethanol, 2-(2-butoxyethoxy)- (8CI, 9CI) (CA INDEX NAME)

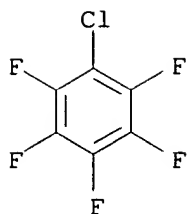


IT 344-07-0, Chloropentafluorobenzene

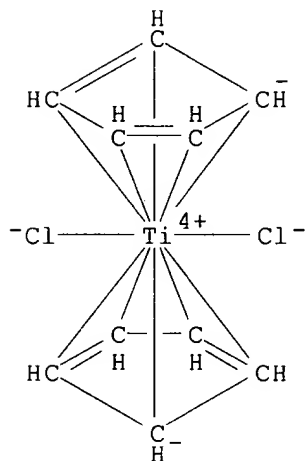
(reaction of, with diethylene glycol monobutyl ether)

RN 344-07-0 USPATFULL

CN Benzene, chloropentafluoro- (6CI, 8CI, 9CI) (CA INDEX NAME)



IT **1271-19-8**, Bis(cyclopentadienyl)titanium dichloride
 (reaction of, with glycol ethers)
 RN 1271-19-8 USPATFULL
 CN Titanium, dichlorobis(η 5-2,4-cyclopentadien-1-yl)- (9CI) (CA INDEX NAME)



L49 ANSWER 9 OF 11 USPATFULL on STN
 ACCESSION NUMBER: 85:66775 USPATFULL
 TITLE: Prestressing elements coated with plastic material and process for making them
 INVENTOR(S): Dreher, Bernd, Basel, Switzerland
 Schneider, Wolfgang, Kaiseraugst, Switzerland
 PATENT ASSIGNEE(S): Ciba Geigy Corporation, Ardsley, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4552815		19851112	<--
APPLICATION INFO.:	US 1983-534995		19830922	(6)

	NUMBER	DATE	
PRIORITY INFORMATION:	CH 1982-5808	19821001	<--
	CH 1983-756	19830210	<--
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Ives, Patrick C.		
LEGAL REPRESENTATIVE:	Hall, Luther A. R.		

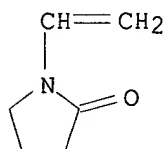
NUMBER OF CLAIMS: 15
 EXEMPLARY CLAIM: 1,14
 LINE COUNT: 623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Prestressing elements having a two-layer plastics covering, the inner layer being moldable, storage-stable at room temperature and thermally curable, and the outer layer consisting of a radiation-cured plastics material, are excellently suitable for producing supporting structural elements, particularly concrete supporting structures and rock bracings.

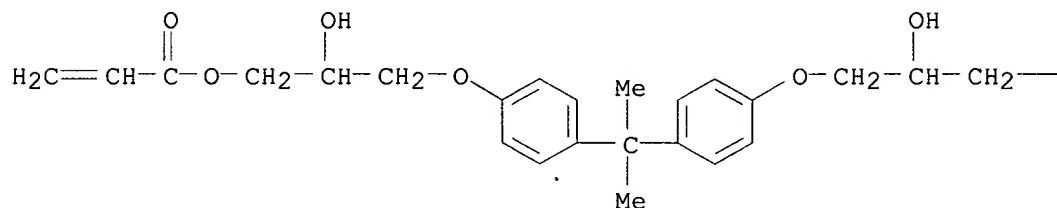
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 88-12-0, uses and miscellaneous
 (coatings, for steel prestressing elements)
 RN 88-12-0 USPATFULL
 CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



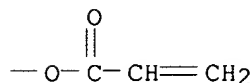
IT 4687-94-9 13048-33-4 15625-89-5
 42978-66-5

(coatings, for steel prestressing elements)
 RN 4687-94-9 USPATFULL
 CN 2-Propenoic acid, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

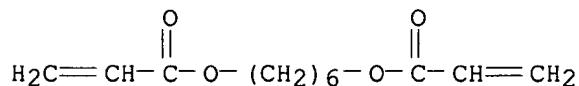


PAGE 1-A

PAGE 1-B

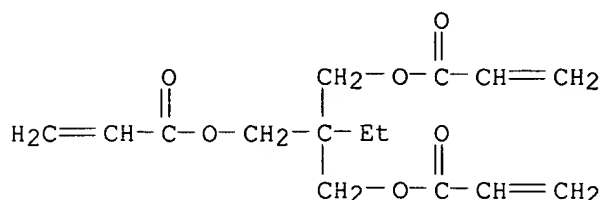


RN 13048-33-4 USPATFULL
 CN 2-Propenoic acid, 1,6-hexanediyl ester (9CI) (CA INDEX NAME)



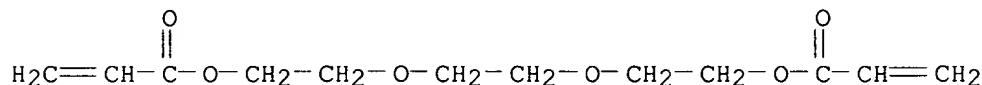
RN 15625-89-5 USPATFULL

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 42978-66-5 USPATFULL

CN 2-Propenoic acid, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] ester (9CI) (CA INDEX NAME)



3 (D1-Me)

L49 ANSWER 10 OF 11 USPATFULL on STN

ACCESSION NUMBER: 83:54948 USPATFULL

TITLE: Radiation curable ceramic pigment composition

INVENTOR(S): Scheve, Bernard J., Wilmington, DE, United States

PATENT ASSIGNEE(S): Hercules Incorporated, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4416974		19831122
APPLICATION INFO.:	US 1981-318518		19811105 (6)
RELATED APPLN. INFO.:	Division of Ser. No. US 1980-217975, filed on 19 Dec 1980, now patented, Pat. No. US 4306012 which is a continuation-in-part of Ser. No. US 1979-100609, filed on 5 Dec 1979, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Brammer, Jack P.		
LEGAL REPRESENTATIVE:	Staves, Marion C.		
NUMBER OF CLAIMS:	7		
EXEMPLARY CLAIM:	1		
LINE COUNT:	473		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A radiation curable printing medium suitable for screen printing on glass, metal and ceramics which is to be cured and subsequently fired, comprising

(a) 4 to 25% by weight of a polymerizable, liquid prepolymer containing at least about two ethylenically unsaturated end groups;

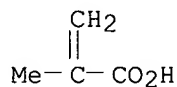
(b) 4 to 15% by weight of at least one ethylenically unsaturated

(c) 60 to 90% by weight of a ceramic frit; and

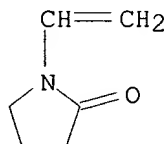
(d) 0.02 to 2% by weight of a polymerization inhibitor.

IT 79-41-4, uses and miscellaneous 88-12-0, uses and miscellaneous 103-11-7 106-74-1 106-91-2D, reaction products with polyesters 108-05-4, uses and miscellaneous 142-90-5 868-77-9D, reaction products with polyurethanes 923-26-2D, reaction products with polyurethanes 1330-61-6 3290-92-4 9052-50-0D , reaction products with hydroxyethyl methacrylate 9063-78-9D, reaction products with hydroxypropyl methacrylate 25584-83-2 27813-02-1 48145-04-6 55636-50-5D, reaction products with hydroxyethyl methacrylate 58686-11-6D, reaction products with hydroxypropyl methacrylate 67939-66-6D, reaction products with glycidyl methacrylate 71519-83-0D, reaction products with hydroxypropyl methacrylate (binders, for photocurable inks)

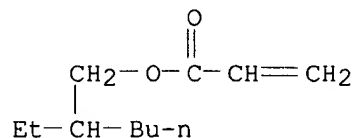
CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



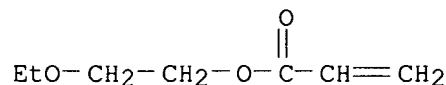
CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



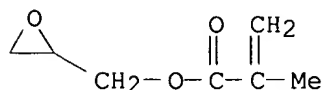
CN 2-Propenoic acid, 2-ethylhexyl ester (9CI) (CA INDEX NAME)



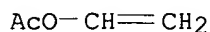
CN 2-Propenoic acid, 2-ethoxyethyl ester (9CI) (CA INDEX NAME)



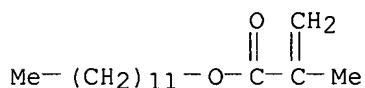
RN 106-91-2 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester (9CI) (CA INDEX NAME)



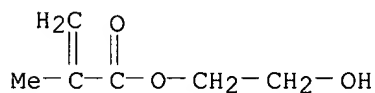
RN 108-05-4 USPATFULL
 CN Acetic acid ethenyl ester (9CI) (CA INDEX NAME)



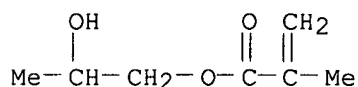
RN 142-90-5 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, dodecyl ester (9CI) (CA INDEX NAME)



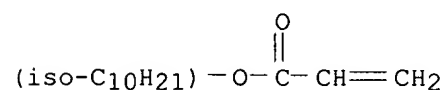
RN 868-77-9 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



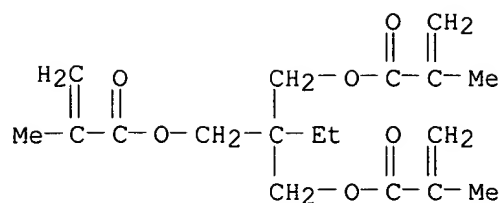
RN 923-26-2 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester (9CI) (CA INDEX NAME)



RN 1330-61-6 USPATFULL
 CN 2-Propenoic acid, isodecyl ester (9CI) (CA INDEX NAME)



RN 3290-92-4 USPATFULL
 CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[2-methyl-1-oxo-2-propenyl]oxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

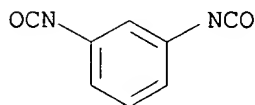


RN 9052-50-0 USPATFULL

CN Oxirane, methyl-, polymer with 1,3-diisocyanatomethylbenzene and oxirane
(9CI) (CA INDEX NAME)

CM 1

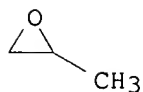
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1-Me

CM 2

CRN 75-56-9
CMF C3 H6 O



CM 3

CRN 75-21-8
CMF C2 H4 O

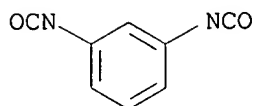


RN 9063-78-9 USPATFULL

CN Hexanedioic acid, polymer with 1,3-diisocyanatomethylbenzene,
1,2-ethanediol and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

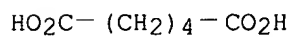
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CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1-Me

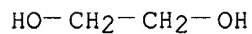
CM 2

CRN 124-04-9
CMF C6 H10 O4



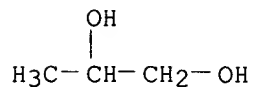
CM 3

CRN 107-21-1
CMF C2 H6 O2



CM 4

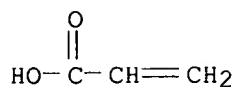
CRN 57-55-6
CMF C3 H8 O2



RN 25584-83-2 USPATFULL
CN 2-Propenoic acid, monoester with 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

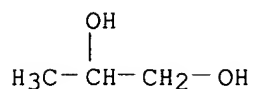
CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 57-55-6

CMF C3 H8 O2



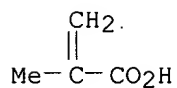
RN 27813-02-1 USPATFULL

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4

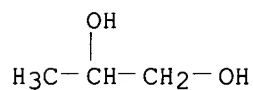
CMF C4 H6 O2



CM 2

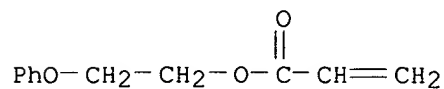
CRN 57-55-6

CMF C3 H8 O2



RN 48145-04-6 USPATFULL

CN 2-Propenoic acid, 2-phenoxyethyl ester (9CI) (CA INDEX NAME)

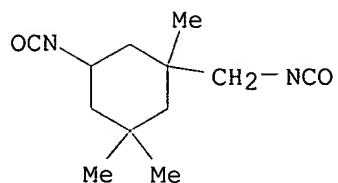


RN 55636-50-5 USPATFULL

CN Hexanedioic acid, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

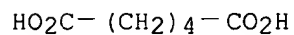
CM 1

CRN 4098-71-9
CMF C12 H18 N2 O2



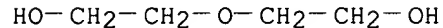
CM 2

CRN 124-04-9
CMF C6 H10 O4



CM 3

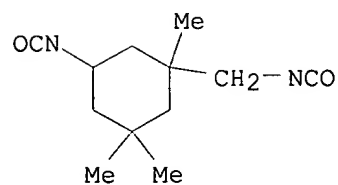
CRN 111-46-6
CMF C4 H10 O3



RN 58686-11-6 USPATFULL
CN Hexanedioic acid, polymer with 1,2-ethanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 1,2-propanediol (9CI)
(CA INDEX NAME)

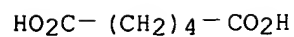
CM 1

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 2

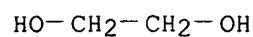
CRN 124-04-9
CMF C6 H10 O4



CM 3

CRN 107-21-1

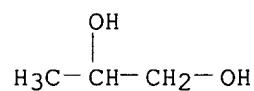
CMF C2 H6 O2



CM 4

CRN 57-55-6

CMF C3 H8 O2



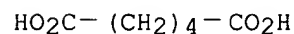
RN 67939-66-6 USPATFULL

CN 1,3-Benzenedicarboxylic acid, polymer with hexanedioic acid,
2,2'-oxybis[ethanol] and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

CRN 124-04-9

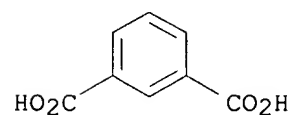
CMF C6 H10 O4



CM 2

CRN 121-91-5

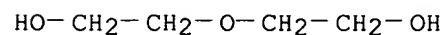
CMF C8 H6 O4



CM 3

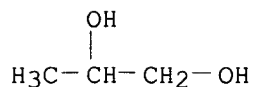
CRN 111-46-6

CMF C4 H10 O3



CM 4

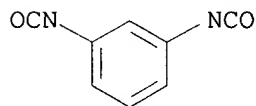
CRN 57-55-6
CMF C3 H8 O2



RN 71519-83-0 USPATFULL
CN Hexanedioic acid, polymer with 1,3-diisocyanatomethylbenzene,
1,2-ethanediol and α -hydro- ω -hydroxypoly[oxy(methyl-1,2-
ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

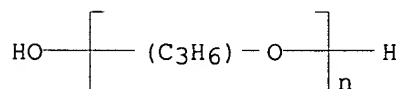
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1-Me

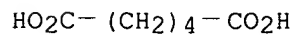
CM 2

CRN 25322-69-4
CMF (C3 H6 O)_n H2 O
CCI IDS, PMS
CDES 8:ID



CM 3

CRN 124-04-9
CMF C6 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2HO-CH₂-CH₂-OH

L49 ANSWER 11 OF 11 USPATFULL on STN

ACCESSION NUMBER: 81:68320 USPATFULL

TITLE: Process of radiation and heat treatment of printing medium

INVENTOR(S): Scheve, Bernard J., Wilmington, DE, United States

PATENT ASSIGNEE(S): Hercules Incorporated, Wilmington, DE, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4306012		19811215 <--
APPLICATION INFO.:	US 1980-217975		19801219 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1979-100609, filed on 5 Dec 1979, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Brammer, Jack P.		
LEGAL REPRESENTATIVE:	Staves, Marion C.		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
LINE COUNT:	470		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A radiation curable printing medium suitable for screen printing on glass, metal and ceramics which is to be cured and subsequently fired, comprising

(a) 4 to 25% by weight of a polymerizable, liquid prepolymer containing at least about two ethylenically unsaturated end groups;

(b) 4 to 15% by weight of at least one ethylenically unsaturated polymerizable monomer containing a polar functional group;

(c) 60 to 90% by weight of a ceramic frit; and

(d) 0.02 to 2% by weight of a polymerization inhibitor.

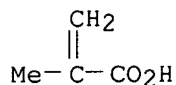
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 79-41-4, uses and miscellaneous 88-12-0, uses and miscellaneous 103-11-7 106-74-1 106-91-2D, reaction products with polyesters 108-05-4, uses and miscellaneous 142-90-5 868-77-9D, reaction products with polyurethanes 923-26-2D, reaction products with polyurethanes 1330-61-6 3290-92-4 9052-50-0D, reaction products with hydroxyethyl methacrylate 9063-78-9D, reaction products with hydroxypropyl methacrylate 25584-83-2 27813-02-1 48145-04-6 55636-50-5D, reaction products with hydroxyethyl methacrylate 58686-11-6D, reaction products with hydroxypropyl methacrylate 67939-66-6D, reaction products with glycidyl methacrylate 71519-83-0D, reaction

products with hydroxypropyl methacrylate
(binders, for photocurable inks)

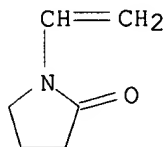
RN 79-41-4 USPATFULL

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



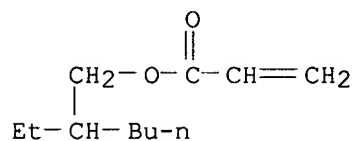
RN 88-12-0 USPATFULL

CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)



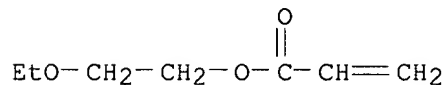
RN 103-11-7 USPATFULL

CN 2-Propenoic acid, 2-ethylhexyl ester (9CI) (CA INDEX NAME)



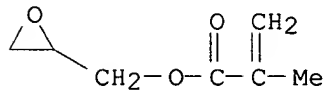
RN 106-74-1 USPATFULL

CN 2-Propenoic acid, 2-ethoxyethyl ester (9CI) (CA INDEX NAME)



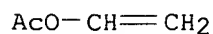
RN 106-91-2 USPATFULL

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester (9CI) (CA INDEX NAME)



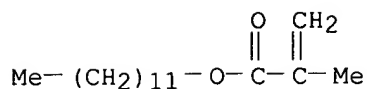
RN 108-05-4 USPATFULL

CN Acetic acid ethenyl ester (9CI) (CA INDEX NAME)



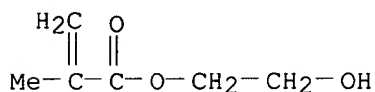
RN 142-90-5 USPATFULL

CN 2-Propenoic acid, 2-methyl-, dodecyl ester (9CI) (CA INDEX NAME)



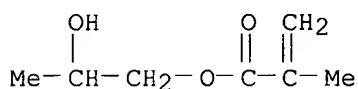
RN 868-77-9 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



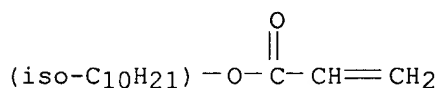
RN 923-26-2 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester (9CI) (CA INDEX NAME)



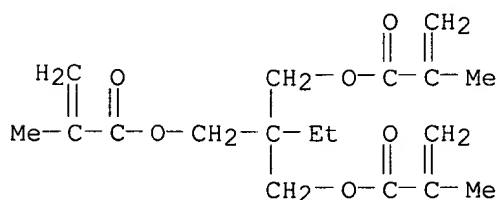
RN 1330-61-6 USPATFULL

CN 2-Propenoic acid, isodecyl ester (9CI) (CA INDEX NAME)



RN 3290-92-4 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[2-methyl-1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)



RN 9052-50-0 USPATFULL

CN Oxirane, methyl-, polymer with 1,3-diisocyanatomethylbenzene and oxirane (9CI) (CA INDEX NAME)

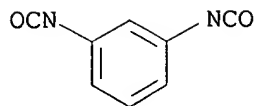
CM 1

CRN 26471-62-5

CMF C9 H6 N2 O2

CCI IDS

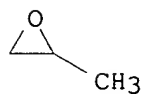
CDES 8:ID



D1- Me

CM 2

CRN 75-56-9
CMF C3 H6 O



CM 3

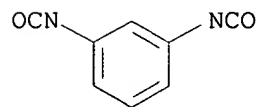
CRN 75-21-8
CMF C2 H4 O



RN 9063-78-9 USPATFULL
CN Hexanedioic acid, polymer with 1,3-diisocyanatomethylbenzene,
1,2-ethanediol and 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

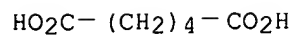
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1- Me

CM 2

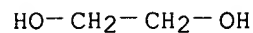
CRN 124-04-9
CMF C6 H10 O4



CM 3

CRN 107-21-1

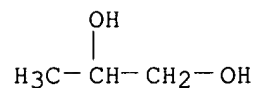
CMF C2 H6 O2



CM 4

CRN 57-55-6

CMF C3 H8 O2



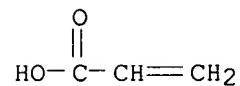
RN 25584-83-2 USPATFULL

CN 2-Propenoic acid, monoester with 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

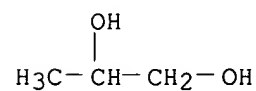
CMF C3 H4 O2



CM 2

CRN 57-55-6

CMF C3 H8 O2



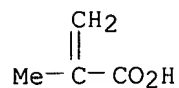
RN 27813-02-1 USPATFULL

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (9CI) (CA INDEX NAME)

CM 1

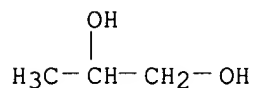
CRN 79-41-4

CMF C4 H6 O2

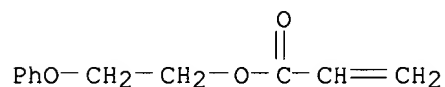


CM 2

CRN 57-55-6
CMF C3 H8 O2



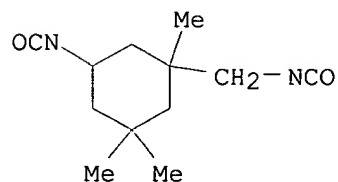
RN 48145-04-6 USPATFULL
CN 2-Propenoic acid, 2-phenoxyethyl ester (9CI) (CA INDEX NAME)



RN 55636-50-5 USPATFULL
CN Hexanedioic acid, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

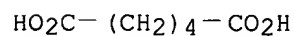
CM 1

CRN 4098-71-9
CMF C12 H18 N2 O2



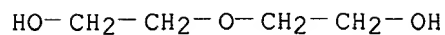
CM 2

CRN 124-04-9
CMF C6 H10 O4



CM 3

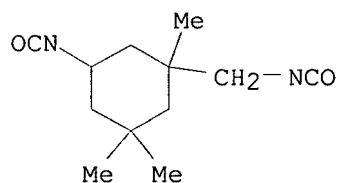
CRN 111-46-6
CMF C4 H10 O3



RN 58686-11-6 USPATFULL
CN Hexanedioic acid, polymer with 1,2-ethanediol, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and 1,2-propanediol (9CI)
(CA INDEX NAME)

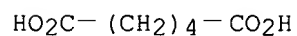
CM 1

CRN 4098-71-9
CMF C12 H18 N2 O2



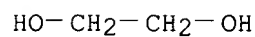
CM 2

CRN 124-04-9
CMF C6 H10 O4



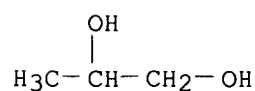
CM 3

CRN 107-21-1
CMF C2 H6 O2



CM 4

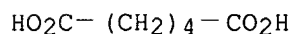
CRN 57-55-6
CMF C3 H8 O2



RN 67939-66-6 USPATFULL
CN 1,3-Benzenedicarboxylic acid, polymer with hexanedioic acid,
2,2'-oxybis[ethanol] and 1,2-propanediol (9CI) (CA INDEX NAME)

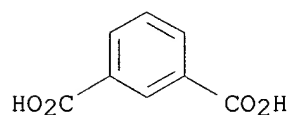
CM 1

CRN 124-04-9
CMF C6 H10 O4



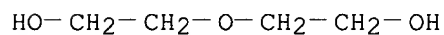
CM 2

CRN 121-91-5
CMF C8 H6 O4



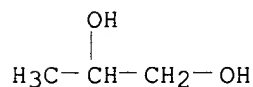
CM 3

CRN 111-46-6
CMF C4 H10 O3



CM 4

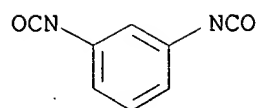
CRN 57-55-6
CMF C3 H8 O2



RN 71519-83-0 USPATFULL
CN Hexanedioic acid, polymer with 1,3-diisocyanatomethylbenzene,
1,2-ethanediol and α -hydro- ω -hydroxypoly[oxy(methyl-1,2-
ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1-Me

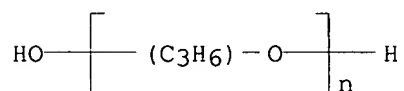
CM 2

CRN 25322-69-4

CMF (C3 H6 O)_n H2 O

CCI IDS, PMS

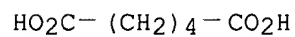
CDES 8:ID



CM 3

CRN 124-04-9

CMF C6 H10 O4



CM 4

CRN 107-21-1

CMF C2 H6 O2

